

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: P521949

Luminaire Tested: **SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521949
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

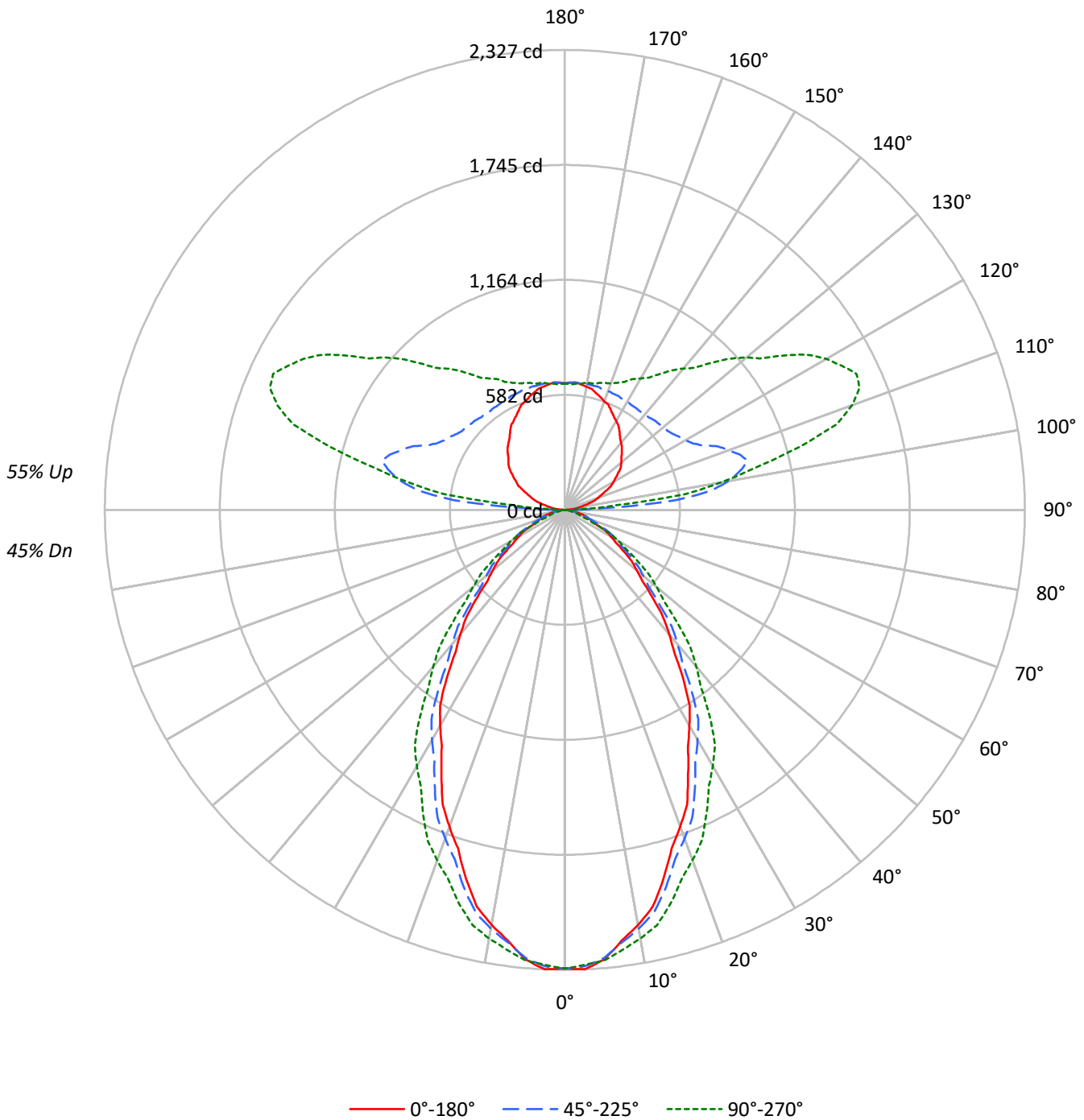
Lumens per Lamp: N/A
Luminaire Lumens: 7526.7 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 74.7
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									
RC	80					70					50					30					10				
RW	70	50	30	10	70	50	30	10	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°	21415	21415	21415
5°	21148	21072	21195
10°	19980	20161	20629
15°	18444	18872	19718
20°	16749	17379	18529
25°	15023	15842	17262
30°	13433	14311	15949
35°	11746	12596	14397
40°	9887	10672	12463
45°	8159	8863	10406
50°	6812	7426	8668
55°	5783	6373	7160
60°	4943	5525	5713
65°	3936	4648	3692
70°	3488	3626	2252
75°	3230	2941	1380
80°	2975	2704	1190
85°	2699	2477	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.9	2.8
10°-20°	553.8	7.4
20°-30°	717.3	9.5
30°-40°	702.4	9.3
40°-50°	537.6	7.1
50°-60°	358.3	4.8
60°-70°	195.5	2.6
70°-80°	81.5	1.1
80°-90°	23.1	0.3
90°-100°	330.0	4.4
100°-110°	797.5	10.6
110°-120°	850.5	11.3
120°-130°	688.9	9.2
130°-140°	533.4	7.1
140°-150°	406.9	5.4
150°-160°	294.5	3.9
160°-170°	181.4	2.4
170°-180°	61.4	0.8
0°-30°	1483.9	19.7
0°-40°	2186.3	29.0
0°-60°	3082.2	41.0
0°-90°	3382.2	44.9
90°-120°	1978.0	26.3
90°-150°	3607.1	47.9
90°-180°	4144.0	55.1
0°-180°	7526.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2321	2321	2321	2321	2321	
5°	2283	2260	2275	2280	2288	212
15°	1931	1924	1976	2030	2064	539
25°	1476	1480	1556	1624	1696	679
35°	1043	1048	1118	1194	1278	648
45°	625	637	679	731	798	488
55°	360	374	396	411	445	326
65°	180	195	213	186	169	187
75°	91	91	82	57	39	97
85°	26	26	23	15	9	28
90°	0	0	0	0	0	3
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2321.1	2321.1	2321.1	2321.1	2321.1
2.5°	2326.8	2306.1	2311.3	2311.1	2304.8
5°	2283.4	2260.5	2275.2	2280.5	2288.5
7.5°	2198.7	2181.3	2208.2	2228.1	2244.3
10°	2132.7	2117.7	2152.0	2181.0	2201.9
12.5°	2056.1	2043.5	2086.0	2124.9	2152.2
15°	1931.0	1924.0	1975.8	2029.6	2064.4
17.5°	1797.2	1793.8	1853.2	1915.9	1960.5
20°	1705.9	1704.9	1770.1	1835.4	1887.2
22.5°	1613.9	1616.0	1684.5	1752.5	1811.4
25°	1475.7	1479.7	1556.2	1624.0	1695.7
27.5°	1348.0	1349.8	1428.9	1500.5	1577.0
30°	1260.9	1265.8	1343.3	1417.5	1497.1
32.5°	1173.7	1179.4	1255.4	1332.0	1413.2
35°	1042.9	1047.9	1118.3	1193.5	1278.2
37.5°	908.1	914.8	977.3	1048.5	1131.7
40°	820.9	830.8	886.1	953.1	1034.8
42.5°	737.0	749.3	800.5	864.1	937.8
45°	625.3	637.3	679.3	730.7	797.5
47.5°	529.2	542.9	575.2	619.5	676.5
50°	474.6	487.5	517.4	550.2	603.9
52.5°	426.5	439.5	466.0	491.3	537.1
55°	359.5	374.5	396.2	411.2	445.1
57.5°	304.5	318.9	336.1	342.9	363.4
60°	267.9	283.8	299.4	298.7	309.6
62.5°	234.4	248.0	263.6	252.8	253.4
65°	180.3	195.2	212.9	186.0	169.1
67.5°	145.6	148.8	167.0	129.7	109.6
70°	129.3	129.3	134.4	100.4	83.5
72.5°	113.9	113.9	109.2	81.7	64.0
75°	90.6	90.6	82.5	56.6	38.7
77.5°	69.9	69.1	63.1	42.3	28.1
80°	56.0	56.0	50.9	33.4	22.4
82.5°	43.8	43.8	39.5	26.1	16.7
85°	25.5	25.5	23.4	15.1	9.2
87.5°	9.0	9.0	8.1	4.9	4.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)