

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: P519075

Luminaire Tested: **SQ4-WB-050U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519075
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

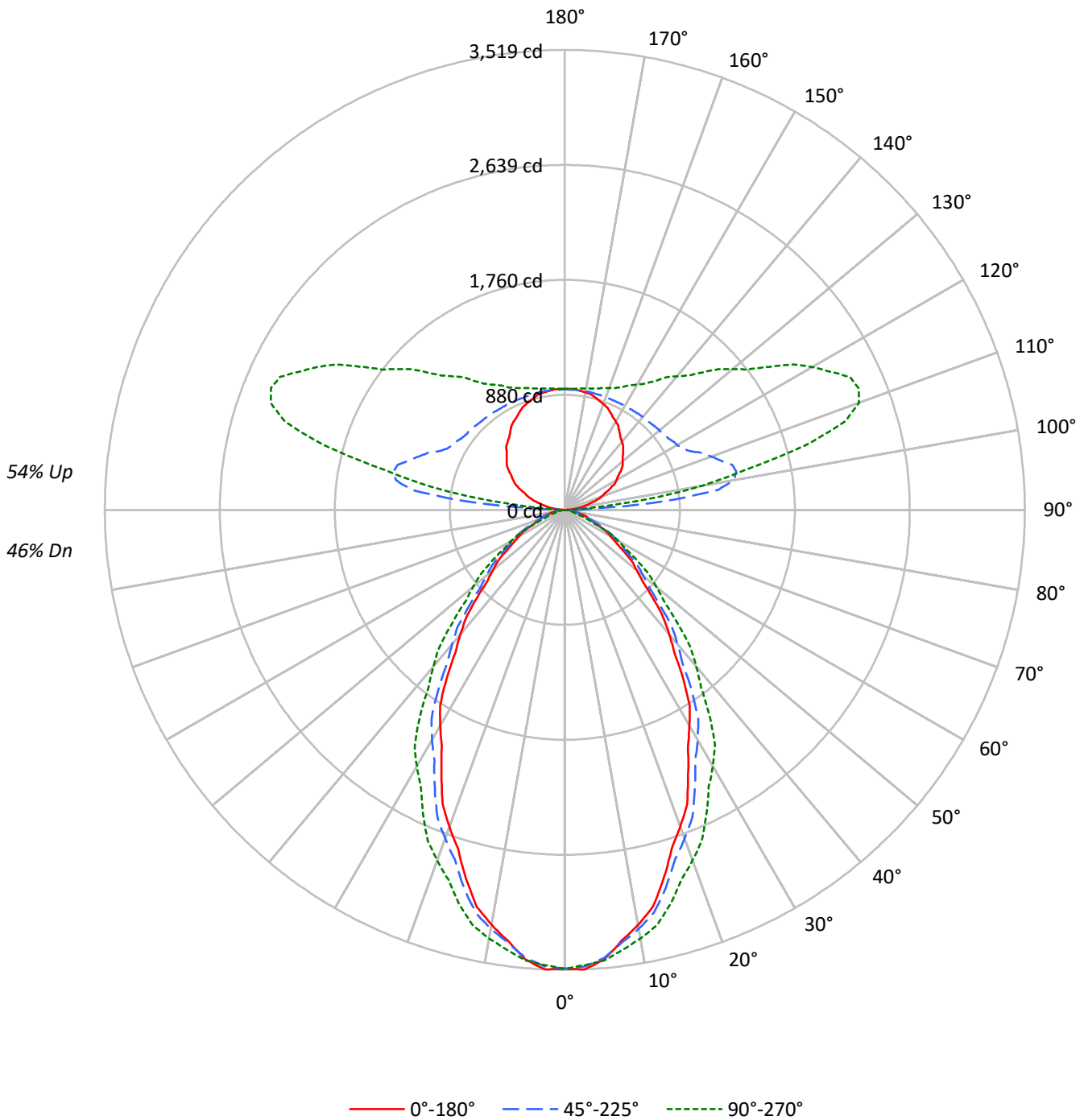
Lumens per Lamp: N/A
Luminaire Lumens: 11155.3 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.6
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	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7988	8704
30°	6772	7216	8042
35°	5923	6351	7258
40°	4985	5380	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2916	3213	3610
60°	2492	2786	2880
65°	1984	2343	1861
70°	1759	1828	1136
75°	1629	1483	695
80°	1500	1364	600
85°	1359	1249	490



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.0	2.9
10°-20°	837.6	7.5
20°-30°	1084.9	9.7
30°-40°	1062.4	9.5
40°-50°	813.2	7.3
50°-60°	541.9	4.9
60°-70°	295.7	2.7
70°-80°	123.2	1.1
80°-90°	38.4	0.3
90°-100°	443.8	4.0
100°-110°	1205.5	10.8
110°-120°	1239.5	11.1
120°-130°	991.0	8.9
130°-140°	778.7	7.0
140°-150°	597.1	5.4
150°-160°	429.4	3.8
160°-170°	262.6	2.4
170°-180°	88.5	0.8
0°-30°	2244.5	20.1
0°-40°	3307.0	29.6
0°-60°	4662.1	41.8
0°-90°	5119.4	45.9
90°-120°	2888.8	25.9
90°-150°	5255.5	47.1
90°-180°	6036.0	54.1
0°-180°	11155.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3454	3419	3442	3450	3462	321
15°	2921	2910	2989	3070	3123	816
25°	2232	2238	2354	2456	2565	1027
35°	1578	1585	1692	1805	1933	981
45°	946	964	1028	1105	1206	738
55°	544	566	599	622	673	493
65°	273	295	322	281	256	283
75°	137	137	125	86	58	146
85°	38	38	35	23	14	42
90°	3	12	21	27	27	6
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3510.8	3510.8	3510.8	3510.8	3510.8
2.5°	3519.4	3488.1	3496.0	3495.8	3486.1
5°	3453.8	3419.2	3441.5	3449.5	3461.5
7.5°	3325.6	3299.4	3340.1	3370.2	3394.6
10°	3225.8	3203.2	3255.1	3298.9	3330.6
12.5°	3110.0	3091.0	3155.2	3214.1	3255.4
15°	2920.8	2910.2	2988.6	3069.9	3122.6
17.5°	2718.4	2713.2	2803.1	2898.0	2965.5
20°	2580.3	2578.8	2677.4	2776.2	2854.5
22.5°	2441.1	2444.4	2548.0	2650.8	2739.9
25°	2232.2	2238.2	2353.9	2456.5	2564.9
27.5°	2039.0	2041.7	2161.3	2269.6	2385.3
30°	1907.1	1914.7	2031.9	2144.0	2264.5
32.5°	1775.3	1784.0	1898.8	2014.7	2137.6
35°	1577.5	1585.0	1691.5	1805.3	1933.3
37.5°	1373.5	1383.8	1478.3	1585.9	1711.8
40°	1241.6	1256.7	1340.2	1441.6	1565.1
42.5°	1114.7	1133.4	1210.8	1307.0	1418.5
45°	945.9	963.9	1027.5	1105.3	1206.2
47.5°	800.4	821.2	870.1	937.0	1023.2
50°	717.9	737.5	782.6	832.2	913.5
52.5°	645.2	664.7	704.9	743.2	812.5
55°	543.8	566.4	599.3	622.0	673.2
57.5°	460.6	482.3	508.4	518.6	549.6
60°	405.2	429.3	452.9	451.7	468.3
62.5°	354.6	375.1	398.7	382.4	383.3
65°	272.7	295.3	322.0	281.3	255.7
67.5°	220.3	225.1	252.6	196.2	165.8
70°	195.6	195.6	203.3	151.9	126.3
72.5°	172.2	172.2	165.1	123.6	96.7
75°	137.1	137.1	124.8	85.7	58.5
77.5°	105.7	104.5	95.5	63.9	42.5
80°	84.7	84.7	77.0	50.5	33.9
82.5°	66.2	66.2	59.8	39.4	25.3
85°	38.5	38.5	35.4	22.9	13.9
87.5°	14.2	15.9	16.5	12.7	11.5
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)