

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: P519087

Luminaire Tested: **SQ4-WB-050U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519087
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

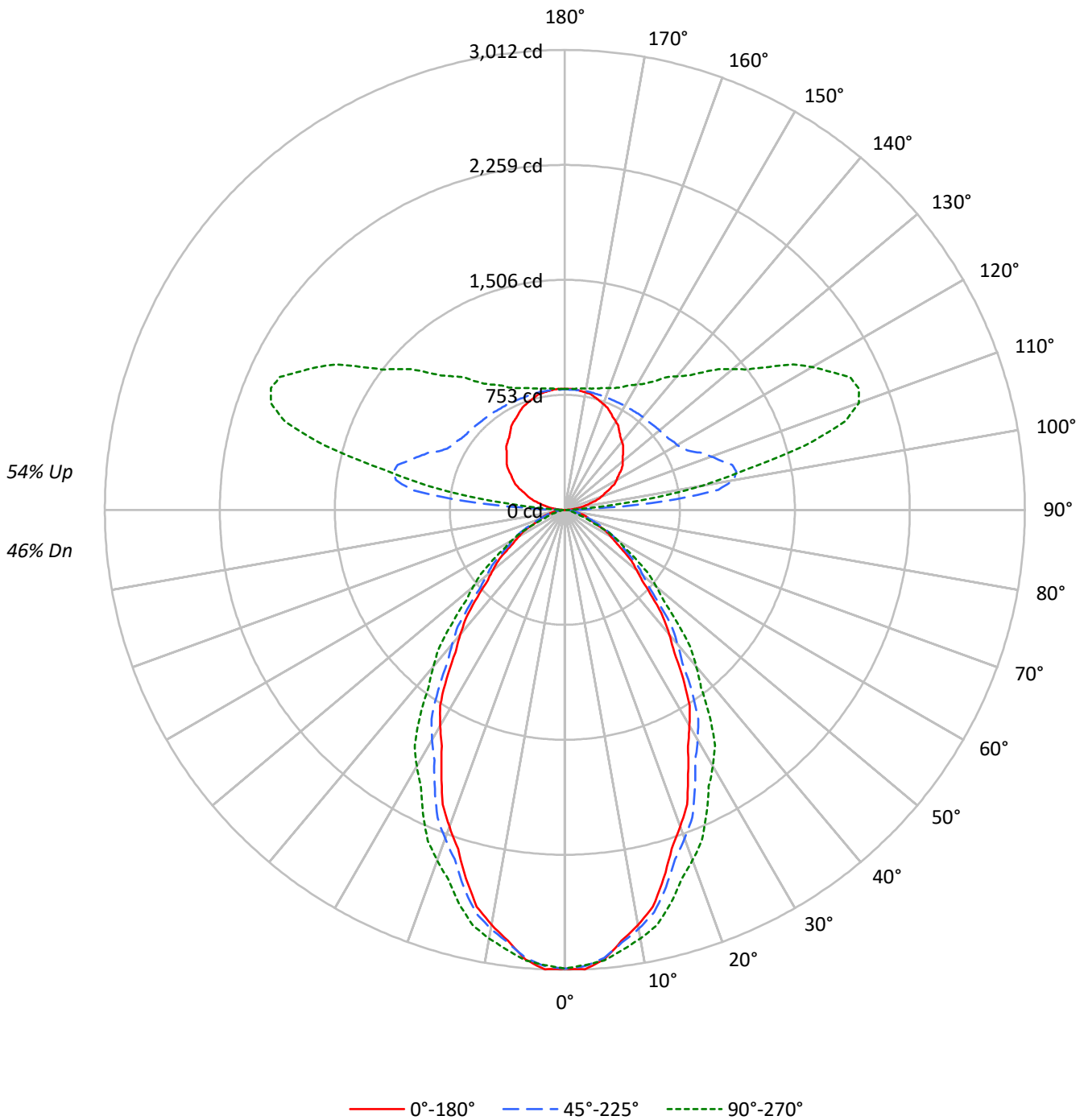
Lumens per Lamp: N/A
Luminaire Lumens: 9547.4 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1284	1167	514
85°	1164	1069	420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.6	2.9
10°-20°	716.9	7.5
20°-30°	928.6	9.7
30°-40°	909.3	9.5
40°-50°	696.0	7.3
50°-60°	463.8	4.9
60°-70°	253.1	2.7
70°-80°	105.4	1.1
80°-90°	32.9	0.3
90°-100°	379.8	4.0
100°-110°	1031.8	10.8
110°-120°	1060.8	11.1
120°-130°	848.2	8.9
130°-140°	666.4	7.0
140°-150°	511.0	5.4
150°-160°	367.5	3.8
160°-170°	224.7	2.4
170°-180°	75.7	0.8
0°-30°	1921.0	20.1
0°-40°	2830.3	29.6
0°-60°	3990.1	41.8
0°-90°	4381.5	45.9
90°-120°	2472.4	25.9
90°-150°	4498.0	47.1
90°-180°	5166.0	54.1
0°-180°	9547.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2956	2926	2945	2952	2963	275
15°	2500	2491	2558	2627	2672	698
25°	1910	1916	2015	2102	2195	879
35°	1350	1357	1448	1545	1655	839
45°	810	825	879	946	1032	631
55°	465	485	513	532	576	422
65°	233	253	276	241	219	243
75°	117	117	107	73	50	125
85°	33	33	30	20	12	36
90°	2	10	18	23	23	5
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3004.8	3004.8	3004.8	3004.8	3004.8
2.5°	3012.2	2985.3	2992.1	2991.9	2983.7
5°	2956.0	2926.3	2945.4	2952.3	2962.6
7.5°	2846.3	2823.9	2858.7	2884.5	2905.4
10°	2760.9	2741.5	2785.9	2823.4	2850.5
12.5°	2661.7	2645.5	2700.5	2750.9	2786.2
15°	2499.8	2490.8	2557.8	2627.4	2672.5
17.5°	2326.6	2322.2	2399.1	2480.3	2538.0
20°	2208.4	2207.1	2291.5	2376.1	2443.1
22.5°	2089.2	2092.1	2180.7	2268.7	2345.0
25°	1910.5	1915.6	2014.6	2102.4	2195.2
27.5°	1745.1	1747.4	1849.8	1942.5	2041.5
30°	1632.3	1638.7	1739.1	1835.0	1938.1
32.5°	1519.4	1526.9	1625.1	1724.3	1829.5
35°	1350.1	1356.6	1447.7	1545.1	1654.7
37.5°	1175.5	1184.3	1265.2	1357.3	1465.1
40°	1062.7	1075.6	1147.1	1233.8	1339.6
42.5°	954.0	970.0	1036.3	1118.6	1214.0
45°	809.5	825.0	879.4	946.0	1032.4
47.5°	685.1	702.9	744.7	802.0	875.7
50°	614.4	631.2	669.8	712.2	781.8
52.5°	552.2	568.9	603.3	636.1	695.4
55°	465.4	484.8	512.9	532.3	576.2
57.5°	394.2	412.8	435.1	443.9	470.4
60°	346.8	367.4	387.6	386.6	400.8
62.5°	303.5	321.0	341.2	327.3	328.0
65°	233.4	252.7	275.6	240.8	218.9
67.5°	188.5	192.7	216.2	167.9	141.9
70°	167.4	167.4	174.0	130.0	108.1
72.5°	147.4	147.4	141.3	105.7	82.8
75°	117.3	117.3	106.8	73.3	50.1
77.5°	90.4	89.4	81.7	54.7	36.4
80°	72.5	72.5	65.9	43.2	29.0
82.5°	56.7	56.7	51.2	33.7	21.6
85°	33.0	33.0	30.3	19.6	11.9
87.5°	12.1	13.6	14.1	10.9	9.9
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)