

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: P563965

Luminaire Tested: **SQ4-PR1-050U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563965
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

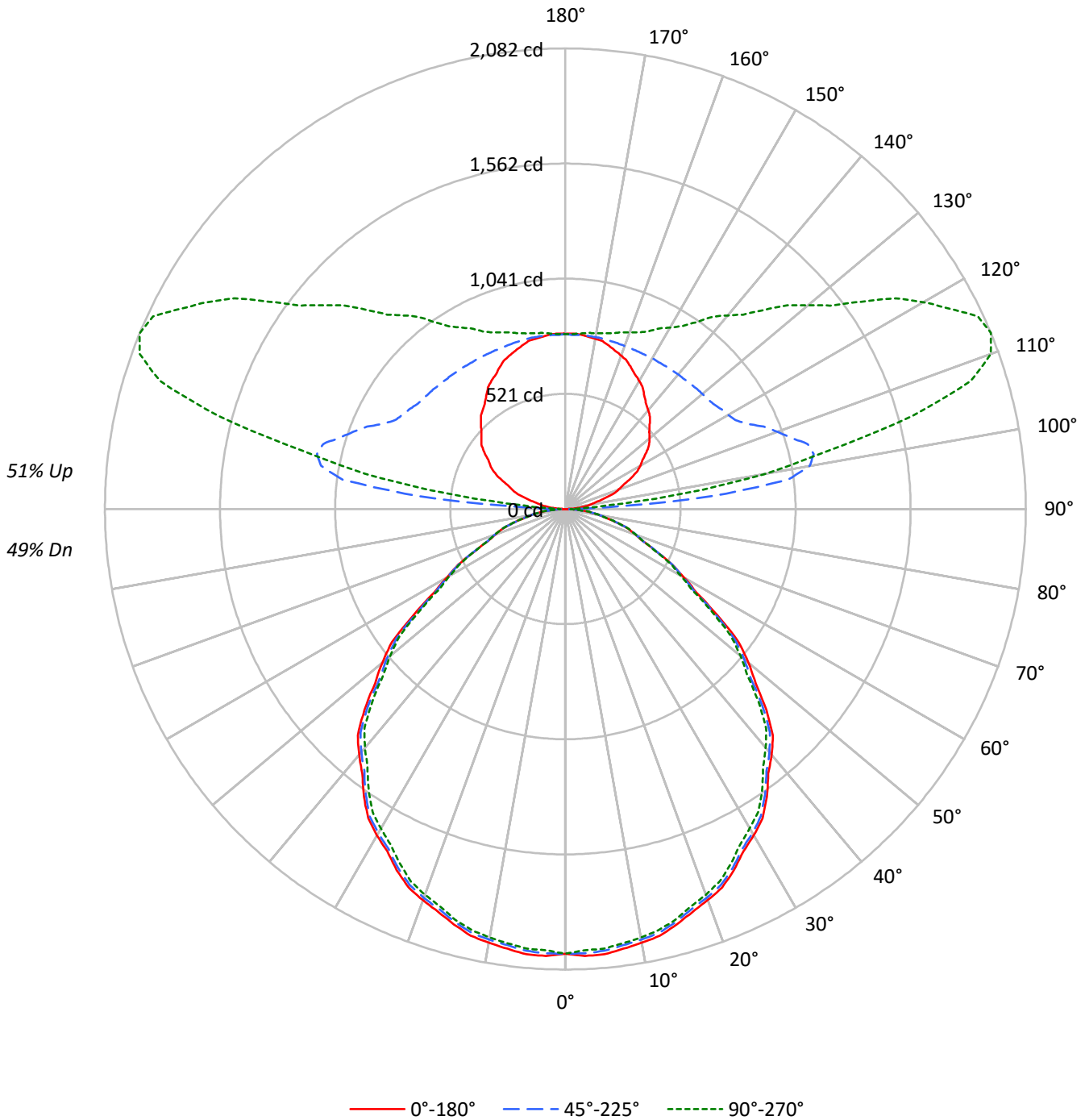
Lumens per Lamp: N/A
Luminaire Lumens: 10194.5 lumens
Efficiency: N/A
Efficacy: 128.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	49
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	49	48	47	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	60	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	36	41	36	31	35	31	27	29	26	23	20
7	59	47	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	20	18	21	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6182	6182	6182
5°	6238	6190	6158
10°	6219	6175	6143
15°	6191	6153	6119
20°	6160	6120	6075
25°	6116	6075	6005
30°	6050	6008	5922
35°	5961	5909	5825
40°	5825	5763	5659
45°	5588	5490	5377
50°	5170	5045	4946
55°	4512	4410	4317
60°	3802	3770	3695
65°	3288	3302	3276
70°	3020	3037	3037
75°	2901	2901	2922
80°	2729	2759	2729
85°	2198	2445	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.1	1.9
10°-20°	543.9	5.3
20°-30°	820.4	8.0
30°-40°	977.5	9.6
40°-50°	963.7	9.5
50°-60°	736.5	7.2
60°-70°	455.8	4.5
70°-80°	258.9	2.5
80°-90°	81.8	0.8
90°-100°	379.8	3.7
100°-110°	1031.8	10.1
110°-120°	1060.8	10.4
120°-130°	848.2	8.3
130°-140°	666.4	6.5
140°-150°	511.0	5.0
150°-160°	367.5	3.6
160°-170°	224.7	2.2
170°-180°	75.7	0.7
0°-30°	1554.4	15.2
0°-40°	2531.9	24.8
0°-60°	4232.2	41.5
0°-90°	5028.6	49.3
90°-120°	2472.4	24.3
90°-150°	4498.0	44.1
90°-180°	5166.0	50.7
0°-180°	10194.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2021	1999	2005	1998	1995	192
15°	1944	1924	1932	1925	1922	549
25°	1802	1780	1790	1771	1770	830
35°	1588	1569	1574	1553	1552	991
45°	1285	1268	1262	1240	1236	984
55°	842	828	822	809	805	754
65°	452	448	454	450	450	458
75°	244	244	244	246	246	258
85°	62	66	69	69	69	73
90°	2	10	18	23	23	6
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°	2010.3	2010.3	2010.3	2010.3	2010.3
2.5°	2022.8	2005.2	2010.3	2006.0	1996.5
5°	2020.7	1998.7	2005.1	1998.1	1994.7
7.5°	2005.1	1983.5	1989.9	1982.9	1980.9
10°	1991.3	1971.0	1977.4	1970.4	1967.0
12.5°	1976.0	1954.4	1962.2	1953.8	1950.4
15°	1944.5	1924.2	1932.4	1925.4	1922.0
17.5°	1909.9	1888.2	1896.4	1888.3	1883.9
20°	1882.2	1861.9	1870.1	1857.9	1856.2
22.5°	1851.7	1831.4	1839.6	1823.3	1823.0
25°	1802.5	1780.5	1790.4	1771.3	1769.6
27.5°	1744.0	1723.7	1731.9	1712.5	1710.4
30°	1703.8	1683.5	1691.7	1670.9	1667.5
32.5°	1658.1	1639.2	1646.0	1625.2	1623.2
35°	1587.8	1569.2	1574.0	1553.2	1551.5
37.5°	1507.8	1490.9	1493.6	1470.7	1469.0
40°	1451.0	1434.1	1435.5	1411.2	1409.5
42.5°	1388.7	1371.8	1370.3	1346.1	1344.4
45°	1284.8	1267.9	1262.3	1239.7	1236.3
47.5°	1166.4	1149.4	1139.0	1120.6	1118.2
50°	1080.5	1063.6	1054.5	1038.8	1033.7
52.5°	987.7	970.7	963.1	948.8	943.7
55°	841.5	828.0	822.5	808.6	805.2
57.5°	702.7	693.5	691.9	678.4	677.0
60°	618.2	613.1	613.0	600.8	600.8
62.5°	546.1	542.4	545.1	537.1	535.7
65°	451.9	448.5	453.7	450.2	450.2
67.5°	377.5	377.5	380.6	379.2	379.2
70°	335.9	335.9	337.7	337.7	337.7
72.5°	298.5	297.2	301.6	301.6	300.3
75°	244.1	244.1	244.1	245.9	245.9
77.5°	190.1	190.5	191.9	191.5	190.1
80°	154.1	155.8	155.8	154.1	154.1
82.5°	118.1	119.8	119.8	119.4	118.1
85°	62.3	65.7	69.3	69.3	69.3
87.5°	18.5	25.4	31.3	32.3	30.9
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)