

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: P563961

Luminaire Tested: **SQ4-PR1-050U-050D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563961
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

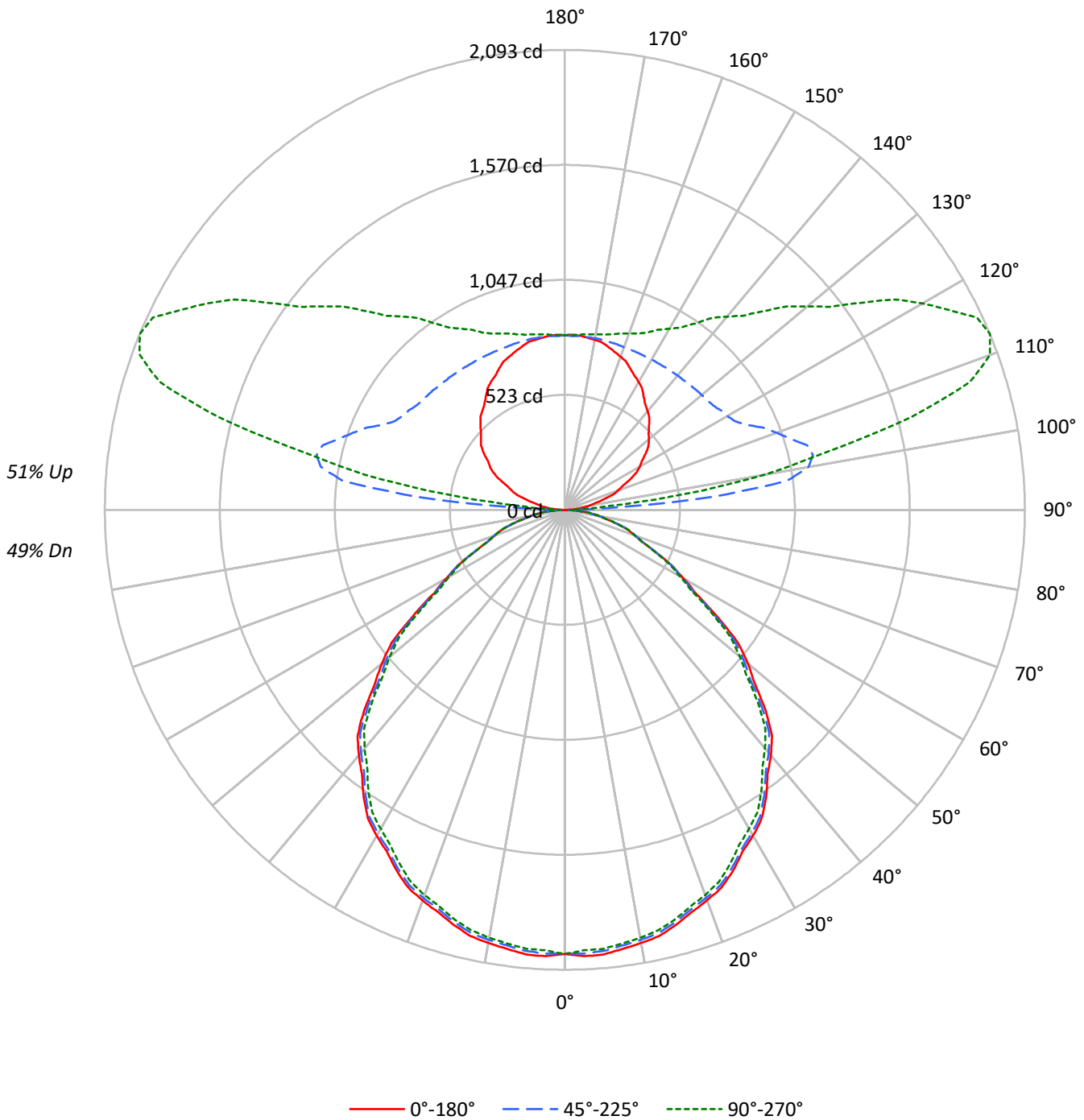
Lumens per Lamp: N/A
Luminaire Lumens: 10246.6 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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°	6214	6214	6214
5°	6270	6222	6189
10°	6250	6207	6174
15°	6223	6184	6151
20°	6191	6152	6106
25°	6148	6107	6036
30°	6081	6038	5952
35°	5992	5939	5855
40°	5855	5792	5688
45°	5617	5518	5404
50°	5196	5071	4971
55°	4535	4433	4339
60°	3821	3790	3714
65°	3305	3318	3293
70°	3036	3052	3052
75°	2916	2916	2936
80°	2743	2773	2743
85°	2212	2456	2456



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	1.9
10°-20°	546.7	5.3
20°-30°	824.6	8.0
30°-40°	982.5	9.6
40°-50°	968.6	9.5
50°-60°	740.3	7.2
60°-70°	458.1	4.5
70°-80°	260.2	2.5
80°-90°	82.2	0.8
90°-100°	381.7	3.7
100°-110°	1037.0	10.1
110°-120°	1066.3	10.4
120°-130°	852.5	8.3
130°-140°	669.8	6.5
140°-150°	513.6	5.0
150°-160°	369.4	3.6
160°-170°	225.9	2.2
170°-180°	76.1	0.7
0°-30°	1562.4	15.2
0°-40°	2544.8	24.8
0°-60°	4253.8	41.5
0°-90°	5054.3	49.3
90°-120°	2485.0	24.3
90°-150°	4521.0	44.1
90°-180°	5192.0	50.7
0°-180°	10246.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2021	2021	2021	2021	2021	
5°	2031	2009	2015	2008	2005	193
15°	1954	1934	1942	1935	1932	552
25°	1812	1790	1800	1780	1779	834
35°	1596	1577	1582	1561	1559	996
45°	1291	1274	1269	1246	1243	989
55°	846	832	827	813	809	758
65°	454	451	456	452	452	460
75°	245	245	245	247	247	259
85°	63	66	70	70	70	73
90°	3	10	18	23	23	6
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2020.6	2020.6	2020.6	2020.6	2020.6
2.5°	2033.1	2015.4	2020.6	2016.2	2006.7
5°	2031.0	2008.9	2015.4	2008.3	2004.9
7.5°	2015.4	1993.6	2000.1	1993.0	1991.0
10°	2001.4	1981.0	1987.5	1980.5	1977.1
12.5°	1986.1	1964.3	1972.2	1963.8	1960.4
15°	1954.5	1934.0	1942.3	1935.2	1931.8
17.5°	1919.6	1897.9	1906.1	1898.0	1893.5
20°	1891.8	1871.4	1879.6	1867.4	1865.7
22.5°	1861.2	1840.7	1849.0	1832.6	1832.3
25°	1811.7	1789.6	1799.6	1780.4	1778.7
27.5°	1752.9	1732.5	1740.7	1721.2	1719.2
30°	1712.5	1692.1	1700.4	1679.4	1676.0
32.5°	1666.6	1647.5	1654.4	1633.5	1631.4
35°	1595.9	1577.2	1582.0	1561.1	1559.4
37.5°	1515.5	1498.5	1501.3	1478.2	1476.5
40°	1458.4	1441.4	1442.8	1418.4	1416.7
42.5°	1395.8	1378.8	1377.3	1352.9	1351.2
45°	1291.4	1274.3	1268.7	1246.0	1242.6
47.5°	1172.3	1155.3	1144.8	1126.3	1123.9
50°	1086.0	1069.0	1059.9	1044.1	1039.0
52.5°	992.7	975.7	968.0	953.6	948.5
55°	845.8	832.2	826.7	812.7	809.3
57.5°	706.2	697.1	695.5	681.9	680.5
60°	621.3	616.2	616.1	603.9	603.9
62.5°	548.9	545.2	547.9	539.8	538.5
65°	454.2	450.8	456.0	452.5	452.5
67.5°	379.4	379.4	382.5	381.1	381.1
70°	337.6	337.6	339.4	339.4	339.4
72.5°	300.0	298.7	303.2	303.1	301.8
75°	245.4	245.4	245.4	247.1	247.1
77.5°	191.1	191.4	192.8	192.5	191.1
80°	154.9	156.6	156.6	154.9	154.9
82.5°	118.7	120.4	120.4	120.1	118.7
85°	62.7	66.1	69.6	69.6	69.6
87.5°	18.6	25.6	31.4	32.4	31.1
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)