

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: P519899

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519899
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

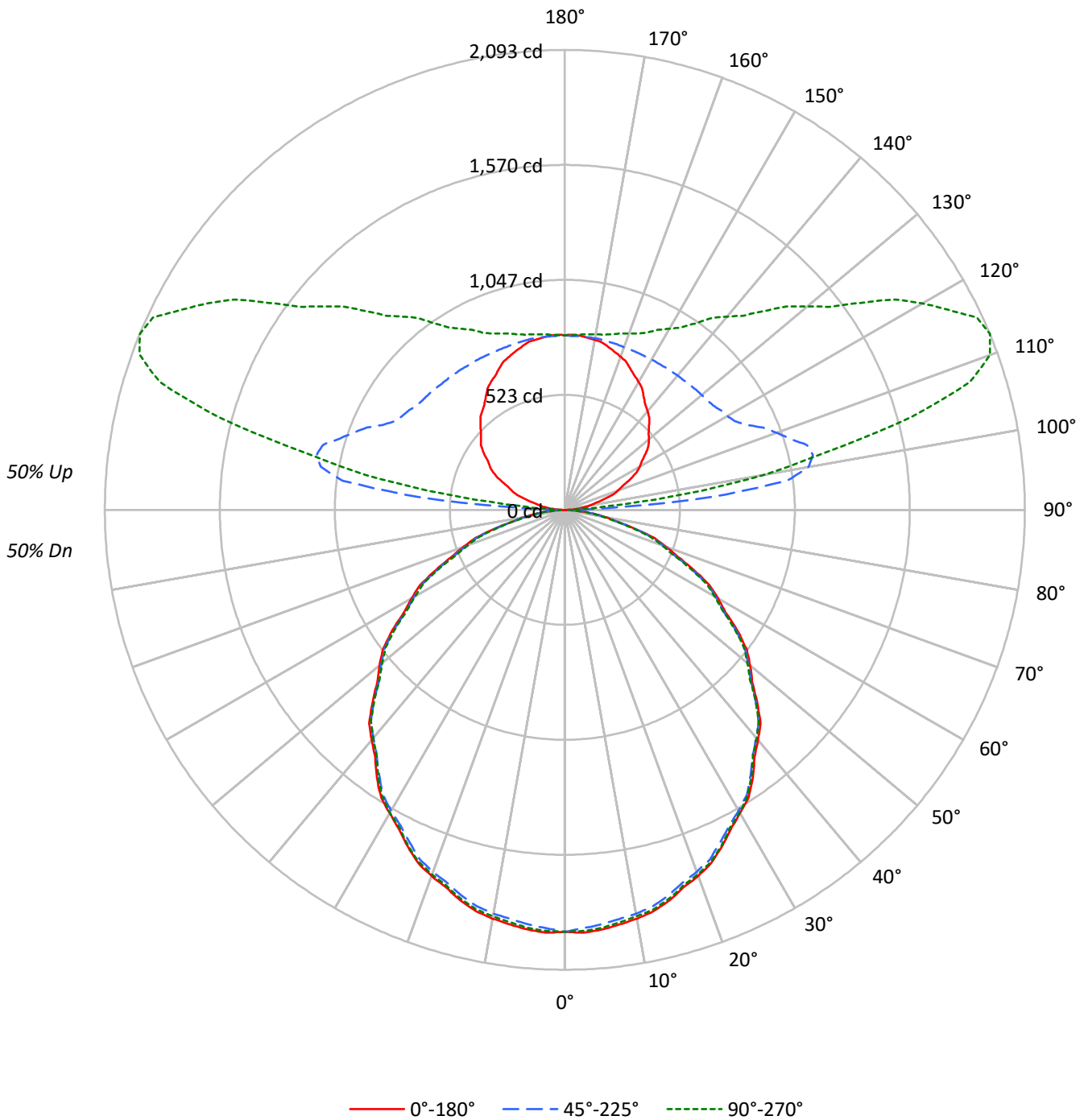
Lumens per Lamp: N/A
Luminaire Lumens: 10435.7 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 89.5
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	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5905	5905	5905
5°	5920	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5804	5737	5779
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5333	5333
50°	5263	5214	5190
55°	5140	5072	5044
60°	4948	4870	4838
65°	4713	4619	4563
70°	4392	4298	4206
75°	3940	3818	3726
80°	3188	3142	3050
85°	1902	2177	2269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.1	1.7
10°-20°	515.9	4.9
20°-30°	774.9	7.4
30°-40°	924.9	8.9
40°-50°	947.8	9.1
50°-60°	845.3	8.1
60°-70°	629.5	6.0
70°-80°	341.7	3.3
80°-90°	82.2	0.8
90°-100°	381.8	3.7
100°-110°	1037.0	9.9
110°-120°	1066.3	10.2
120°-130°	852.5	8.2
130°-140°	669.8	6.4
140°-150°	513.6	4.9
150°-160°	369.4	3.5
160°-170°	225.9	2.2
170°-180°	76.1	0.7
0°-30°	1471.9	14.1
0°-40°	2396.8	23.0
0°-60°	4189.9	40.2
0°-90°	5243.4	50.2
90°-120°	2485.0	23.8
90°-150°	4521.0	43.3
90°-180°	5192.0	49.8
0°-180°	10435.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1918	1915	1894	1912	1910	182
15°	1840	1835	1817	1833	1833	519
25°	1691	1686	1671	1681	1686	779
35°	1491	1486	1473	1473	1480	930
45°	1236	1239	1226	1224	1226	954
55°	959	959	946	938	941	854
65°	648	645	635	627	627	641
75°	332	329	321	316	314	350
85°	54	59	62	64	64	75
90°	3	10	18	23	23	5
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°	1920.0	1920.0	1920.0	1920.0	1920.0
2.5°	1926.2	1922.2	1905.7	1920.0	1918.0
5°	1917.5	1914.9	1894.3	1912.3	1909.8
7.5°	1903.6	1898.6	1878.4	1895.8	1893.3
10°	1889.2	1884.2	1866.0	1881.4	1878.9
12.5°	1870.6	1867.7	1847.6	1863.0	1862.5
15°	1840.4	1835.3	1817.2	1832.7	1832.7
17.5°	1800.2	1797.3	1779.7	1794.5	1792.6
20°	1773.5	1768.5	1753.0	1765.8	1765.8
22.5°	1740.6	1737.6	1722.1	1733.0	1735.0
25°	1691.3	1686.3	1670.7	1681.1	1686.2
27.5°	1636.8	1632.8	1619.8	1626.6	1630.1
30°	1593.6	1593.6	1580.7	1583.5	1591.0
32.5°	1554.5	1554.5	1539.6	1542.3	1545.8
35°	1490.8	1485.8	1472.8	1473.0	1480.5
37.5°	1416.8	1414.3	1406.0	1404.4	1406.5
40°	1367.5	1364.9	1354.5	1357.1	1357.1
42.5°	1318.1	1315.6	1305.2	1301.7	1305.7
45°	1236.3	1238.9	1226.1	1223.5	1226.1
47.5°	1155.7	1155.7	1145.3	1138.2	1142.2
50°	1100.1	1100.1	1089.8	1084.7	1084.7
52.5°	1042.6	1044.5	1032.2	1025.1	1027.1
55°	958.7	958.7	945.9	938.2	940.7
57.5°	866.2	866.2	853.3	845.7	850.3
60°	804.5	804.5	791.7	784.0	786.5
62.5°	742.8	742.8	730.0	722.3	722.8
65°	647.7	645.2	634.8	627.1	627.1
67.5°	556.2	549.7	541.8	531.6	531.6
70°	488.4	485.8	478.0	467.8	467.8
72.5°	426.7	422.1	414.3	406.2	406.2
75°	331.6	329.0	321.3	316.1	313.6
77.5°	237.5	235.5	235.0	227.8	229.8
80°	180.0	180.0	177.4	172.2	172.2
82.5°	128.5	130.6	125.9	124.8	122.9
85°	53.9	59.0	61.7	64.3	64.3
87.5°	10.7	18.3	17.9	21.1	21.1
90°	2.6	10.0	17.9	23.1	23.1
92.5°	23.1	104.5	181.5	78.0	65.9
95°	56.2	208.7	664.8	289.4	194.3
97.5°	93.1	230.6	1019.3	793.0	556.9
100°	117.7	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.6	1156.2	1413.7	1219.7
105°	184.1	286.6	1140.5	1736.5	1633.9
107.5°	227.6	318.0	1074.4	1903.1	1931.6
110°	258.3	340.8	1025.3	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	1596.8	1879.4
122.5°	416.3	481.3	841.7	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.3	817.2	1302.9	1517.4
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.1	1199.5	1370.1
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.1	623.7	799.8	1075.2	1197.2
140°	585.5	638.0	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.1	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	715.4	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.7	787.6	849.4	868.3
160°	741.6	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.7
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	810.5	810.5
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.9	800.3
177.5°	797.3	797.3	791.1	799.3	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)