

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: P519941

Luminaire Tested: **SQ4-F-050U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519941
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

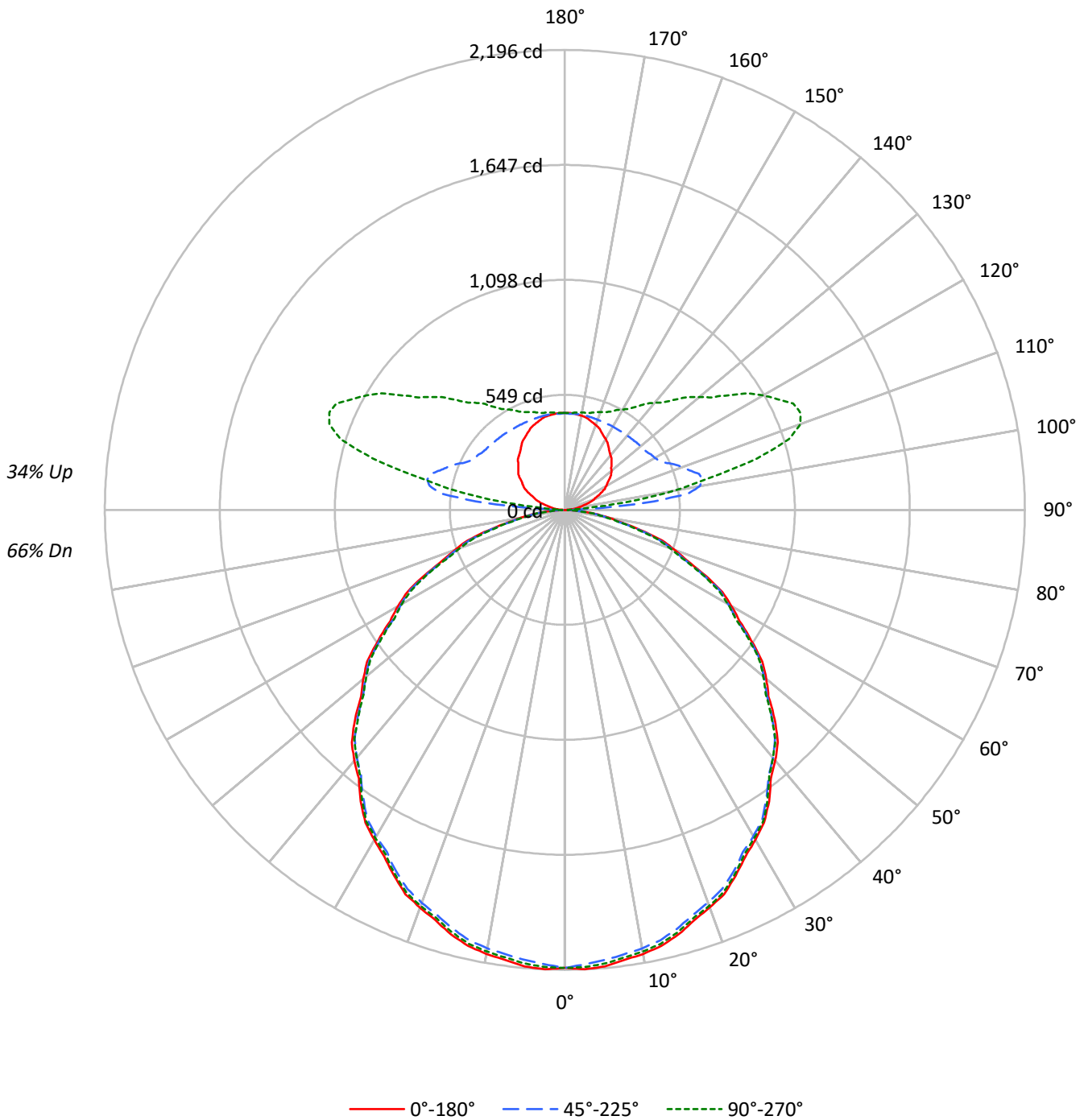
Lumens per Lamp: N/A
Luminaire Lumens: 8985.3 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 70
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13431
10°	13445	13276	13380
15°	13364	13182	13288
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12783	12847
35°	12760	12603	12670
40°	12547	12403	12415
45°	12327	12158	12118
50°	12009	11865	11836
55°	11654	11526	11445
60°	11301	11099	11062
65°	10750	10509	10422
70°	9990	9745	9557
75°	8919	8634	8456
80°	7339	7074	6751
85°	4340	4771	4877



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.4	2.3
10°-20°	587.9	6.5
20°-30°	882.8	9.8
30°-40°	1053.6	11.7
40°-50°	1079.9	12.0
50°-60°	961.6	10.7
60°-70°	716.9	8.0
70°-80°	388.1	4.3
80°-90°	90.1	1.0
90°-100°	221.9	2.5
100°-110°	602.8	6.7
110°-120°	619.7	6.9
120°-130°	495.5	5.5
130°-140°	389.3	4.3
140°-150°	298.5	3.3
150°-160°	214.7	2.4
160°-170°	131.3	1.5
170°-180°	44.2	0.5
0°-30°	1677.1	18.7
0°-40°	2730.7	30.4
0°-60°	4772.2	53.1
0°-90°	5967.3	66.4
90°-120°	1444.4	16.1
90°-150°	2627.7	29.2
90°-180°	3018.0	33.6
0°-180°	8985.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2187	2187	2187	2187	2187	
5°	2189	2184	2159	2178	2175	208
15°	2099	2091	2070	2087	2087	591
25°	1928	1923	1905	1916	1920	888
35°	1699	1692	1678	1681	1687	1061
45°	1417	1410	1398	1390	1393	1090
55°	1087	1088	1075	1064	1067	973
65°	739	736	722	715	716	730
75°	375	371	363	356	356	400
85°	62	67	68	69	69	86
90°	2	6	10	13	13	4
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2187.2	2187.2	2187.2	2187.2	2187.2
2.5°	2195.7	2190.9	2171.6	2187.1	2184.9
5°	2188.7	2184.4	2158.7	2178.1	2175.3
7.5°	2168.3	2164.0	2141.3	2159.3	2156.6
10°	2152.7	2148.3	2125.7	2143.6	2142.2
12.5°	2132.3	2127.9	2105.3	2123.2	2121.7
15°	2098.7	2091.3	2070.1	2086.7	2086.7
17.5°	2054.3	2048.6	2029.0	2042.8	2043.1
20°	2020.6	2016.2	1996.6	2011.7	2013.1
22.5°	1987.0	1982.5	1960.5	1974.4	1977.1
25°	1927.5	1923.1	1905.1	1915.7	1920.0
27.5°	1866.3	1859.8	1841.9	1851.4	1854.5
30°	1819.4	1816.5	1799.9	1804.5	1808.9
32.5°	1770.2	1767.2	1753.1	1755.3	1763.3
35°	1699.4	1692.0	1678.4	1681.4	1687.4
37.5°	1615.5	1612.1	1598.8	1597.1	1602.7
40°	1562.7	1556.9	1544.7	1541.8	1546.2
42.5°	1505.1	1499.2	1484.6	1481.8	1487.4
45°	1417.1	1409.7	1397.7	1390.1	1393.1
47.5°	1318.7	1318.7	1306.0	1297.4	1301.8
50°	1255.0	1255.0	1240.0	1232.6	1236.9
52.5°	1189.0	1190.1	1173.9	1170.0	1168.5
55°	1086.8	1088.3	1074.8	1064.4	1067.3
57.5°	988.3	985.2	969.4	962.6	964.1
60°	918.7	914.3	902.2	891.8	899.2
62.5°	847.8	845.9	833.8	822.0	821.2
65°	738.6	735.7	722.1	714.6	716.1
67.5°	629.9	626.4	614.0	603.3	607.1
70°	555.5	555.5	541.9	535.8	531.4
72.5°	487.0	481.1	471.0	462.6	459.3
75°	375.3	370.9	363.3	355.8	355.8
77.5°	273.2	269.4	264.5	259.4	257.9
80°	207.2	205.7	199.7	198.0	190.6
82.5°	145.9	145.7	142.0	138.1	137.8
85°	61.5	67.4	67.6	69.1	69.1
87.5°	11.1	19.0	18.9	17.1	17.1
90°	1.5	5.9	10.4	13.3	13.3
92.5°	13.3	60.7	105.5	45.3	38.4
95°	32.7	121.4	386.4	168.2	112.9
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.6
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.0	595.9	1125.2	1196.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.5	211.2	567.5	1109.3	1216.6
115°	190.3	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.8	266.6	496.4	928.2	1092.4
122.5°	242.0	279.8	489.3	876.9	1035.3
125°	261.6	297.9	480.0	808.9	954.2
127.5°	279.1	315.2	475.0	757.3	881.9
130°	289.8	324.7	472.6	724.9	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	349.9	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	625.0	695.8
140°	340.3	370.8	463.7	603.4	667.3
142.5°	349.8	378.1	462.5	586.5	640.0
145°	364.2	390.3	460.7	559.8	601.9
147.5°	380.2	402.5	459.2	538.7	571.9
150°	390.8	409.8	459.2	526.8	552.9
152.5°	399.2	415.8	458.1	516.0	537.5
155°	411.6	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.0
167.5°	453.8	456.8	460.7	473.6	474.7
170°	456.3	459.1	460.7	471.1	471.1
172.5°	458.7	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)