

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: P519990

Luminaire Tested: **SQ4-F-075U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519990
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

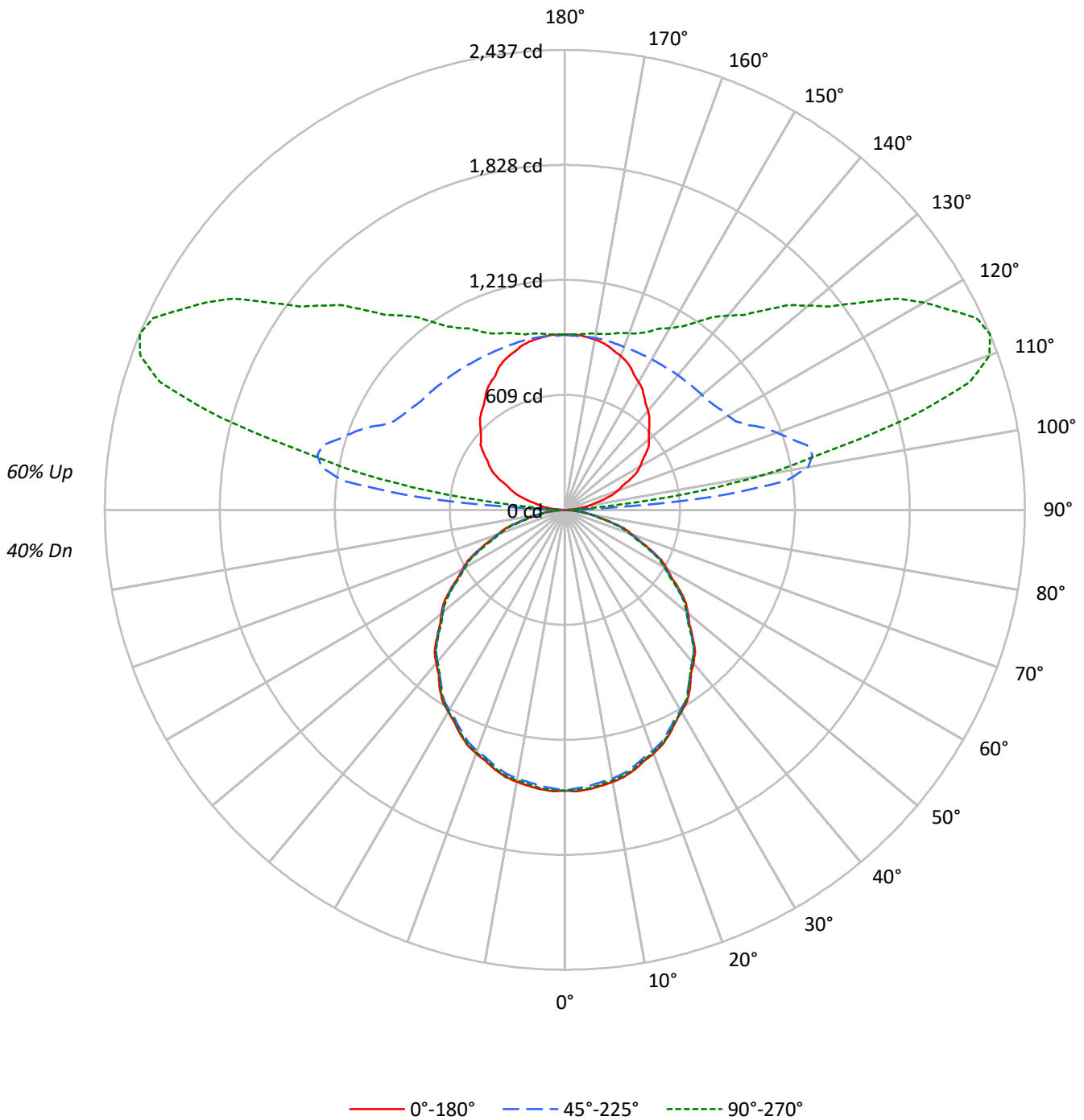
Lumens per Lamp: N/A
Luminaire Lumens: 10111.3 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 72.2
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6854
10°	6858	6774	6821
15°	6811	6726	6783
20°	6748	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6507	6428	6462
40°	6381	6322	6333
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5895	5864
60°	5753	5660	5624
65°	5480	5370	5305
70°	5104	4997	4891
75°	4581	4438	4333
80°	3703	3653	3544
85°	2212	2530	2636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	1.4
10°-20°	399.8	4.0
20°-30°	600.5	5.9
30°-40°	716.8	7.1
40°-50°	734.5	7.3
50°-60°	655.1	6.5
60°-70°	487.9	4.8
70°-80°	264.8	2.6
80°-90°	63.7	0.6
90°-100°	437.8	4.3
100°-110°	1204.7	11.9
110°-120°	1243.4	12.3
120°-130°	996.2	9.9
130°-140°	782.5	7.7
140°-150°	599.6	5.9
150°-160°	431.1	4.3
160°-170°	263.6	2.6
170°-180°	88.9	0.9
0°-30°	1140.7	11.3
0°-40°	1857.5	18.4
0°-60°	3247.1	32.1
0°-90°	4063.5	40.2
90°-120°	2885.9	28.5
90°-150°	5264.2	52.1
90°-180°	6048.0	59.8
0°-180°	10111.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1486	1484	1468	1482	1480	141
15°	1426	1422	1408	1420	1420	402
25°	1311	1307	1295	1303	1307	604
35°	1155	1151	1141	1142	1147	721
45°	958	960	950	948	950	739
55°	743	743	733	727	729	662
65°	502	500	492	486	486	497
75°	257	255	249	245	243	272
85°	42	46	48	50	50	59
90°	2	8	14	18	18	5
95°	65	239	774	331	211	69
105°	215	331	1327	2022	1886	227
115°	381	464	1065	2120	2406	376
125°	525	599	966	1634	1914	469
135°	634	704	938	1321	1495	489
145°	733	783	924	1126	1213	460
155°	830	857	918	1012	1041	381
165°	897	908	922	960	966	253
175°	928	930	924	936	934	88
180°	928	928	928	928	928	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1488.0	1488.0	1488.0	1488.0	1488.0
2.5°	1492.8	1489.6	1476.8	1488.0	1486.4
5°	1486.0	1484.0	1468.0	1481.9	1480.1
7.5°	1475.2	1471.4	1455.7	1469.2	1467.3
10°	1464.1	1460.2	1446.2	1458.1	1456.1
12.5°	1449.7	1447.4	1431.9	1443.8	1443.4
15°	1426.2	1422.4	1408.3	1420.2	1420.2
17.5°	1395.2	1392.8	1379.2	1390.7	1389.2
20°	1374.5	1370.5	1358.5	1368.4	1368.4
22.5°	1348.9	1346.7	1334.6	1343.0	1344.6
25°	1310.7	1306.8	1294.8	1302.8	1306.7
27.5°	1268.5	1265.4	1255.3	1260.6	1263.3
30°	1235.0	1235.0	1225.1	1227.1	1233.1
32.5°	1204.8	1204.8	1193.2	1195.2	1198.0
35°	1155.4	1151.4	1141.4	1141.6	1147.4
37.5°	1098.0	1096.0	1089.6	1088.4	1090.0
40°	1059.7	1057.7	1049.8	1051.7	1051.7
42.5°	1021.5	1019.5	1011.5	1008.8	1011.9
45°	958.2	960.1	950.2	948.2	950.2
47.5°	895.5	895.5	887.6	882.1	885.2
50°	852.5	852.5	844.6	840.6	840.6
52.5°	808.0	809.5	800.0	794.5	795.9
55°	743.0	743.0	733.0	727.1	729.1
57.5°	671.3	671.3	661.3	655.4	659.0
60°	623.5	623.5	613.5	607.6	609.6
62.5°	575.7	575.7	565.7	559.8	560.2
65°	502.0	500.0	492.0	486.0	486.0
67.5°	431.1	426.0	419.9	412.0	412.0
70°	378.4	376.5	370.5	362.6	362.6
72.5°	330.6	327.2	321.1	314.7	314.7
75°	257.0	255.0	249.0	244.9	243.1
77.5°	184.1	182.5	182.0	176.5	178.1
80°	139.4	139.4	137.5	133.4	133.4
82.5°	99.6	101.2	97.6	96.7	95.3
85°	41.8	45.8	47.8	49.8	49.8
87.5°	8.4	14.2	13.9	16.4	16.4
90°	2.0	7.7	13.8	17.8	17.8
92.5°	27.3	116.5	201.9	77.5	63.6
95°	65.1	239.0	774.3	331.1	211.4
97.5°	106.2	265.0	1181.6	910.4	642.3
100°	136.3	281.1	1309.6	1321.8	1078.5
102.5°	164.7	300.3	1342.8	1639.9	1416.6
105°	215.3	331.2	1327.3	2021.5	1886.3
107.5°	263.5	369.3	1251.9	2208.4	2248.6
110°	298.2	394.9	1195.0	2254.9	2393.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.8	423.3	1138.1	2224.9	2436.6
115°	381.2	464.2	1064.7	2120.0	2405.8
117.5°	430.2	506.7	1018.0	1972.7	2295.9
120°	460.2	533.7	997.5	1862.3	2196.5
122.5°	487.1	560.5	983.3	1765.5	2082.7
125°	525.4	598.8	965.9	1633.9	1914.0
127.5°	561.7	631.7	954.4	1524.1	1769.8
130°	580.7	652.2	948.1	1458.9	1682.9
132.5°	602.8	674.3	943.4	1401.4	1603.8
135°	634.0	703.6	938.2	1321.4	1495.3
137.5°	663.3	727.8	933.9	1256.7	1400.0
140°	685.4	745.2	932.3	1213.7	1343.2
142.5°	704.3	759.6	929.1	1175.4	1286.2
145°	732.8	783.0	924.4	1125.9	1212.8
147.5°	763.2	806.5	922.1	1082.0	1151.5
150°	782.2	820.8	920.4	1057.9	1112.0
152.5°	799.6	835.1	918.8	1037.2	1082.0
155°	829.5	856.6	918.5	1012.0	1040.9
157.5°	851.4	873.4	918.5	991.2	1011.3
160°	867.1	884.5	918.5	980.1	995.5
162.5°	879.7	894.1	920.0	970.5	982.9
165°	896.7	908.4	922.5	960.1	965.9
167.5°	908.6	917.5	924.4	951.3	952.9
170°	916.5	922.3	924.4	948.1	948.1
172.5°	922.9	925.5	924.4	943.3	941.7
175°	928.3	930.3	924.4	936.2	934.3
177.5°	929.9	929.9	923.6	933.0	929.9
180°	928.3	928.3	928.3	928.3	928.3

(END OF REPORT)