

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: P520385

Luminaire Tested: **SQ4-F-150U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520385
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

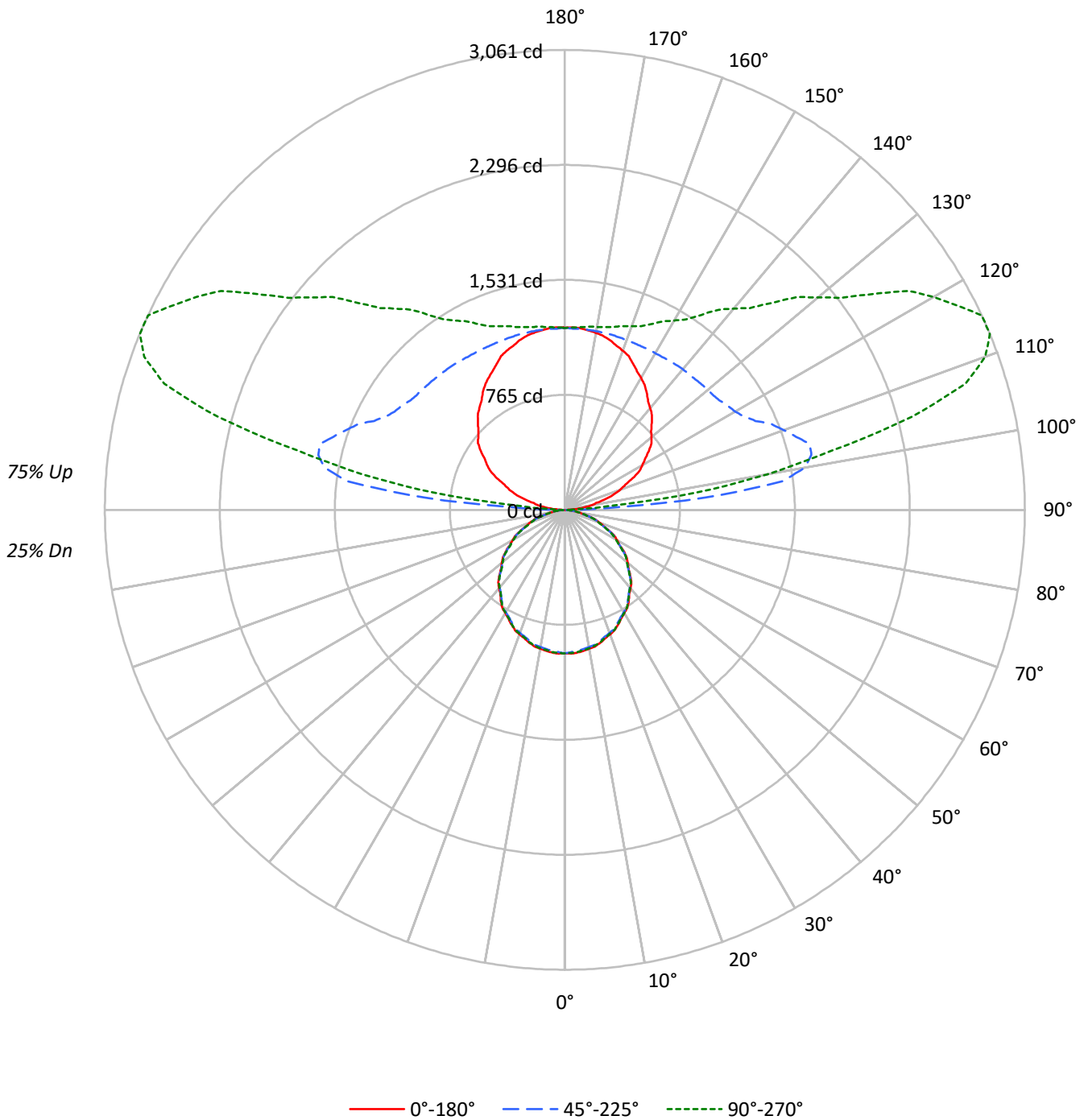
Lumens per Lamp: N/A
Luminaire Lumens: 10420.8 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.4
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5890	5819	5866
10°	5870	5798	5838
15°	5830	5756	5806
20°	5774	5708	5750
25°	5710	5640	5692
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5187	5163
55°	5115	5045	5019
60°	4923	4844	4814
65°	4689	4596	4541
70°	4370	4277	4185
75°	3921	3798	3707
80°	3170	3128	3036
85°	1891	2167	2251



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	0.9
10°-20°	256.6	2.5
20°-30°	385.5	3.7
30°-40°	460.1	4.4
40°-50°	471.5	4.5
50°-60°	420.5	4.0
60°-70°	313.2	3.0
70°-80°	170.0	1.6
80°-90°	41.9	0.4
90°-100°	563.1	5.4
100°-110°	1522.4	14.6
110°-120°	1600.6	15.4
120°-130°	1300.1	12.5
130°-140°	1019.8	9.8
140°-150°	782.7	7.5
150°-160°	562.9	5.4
160°-170°	343.9	3.3
170°-180°	115.9	1.1
0°-30°	732.2	7.0
0°-40°	1192.4	11.4
0°-60°	2084.4	20.0
0°-90°	2609.4	25.0
90°-120°	3686.0	35.4
90°-150°	6788.7	65.1
90°-180°	7811.0	75.0
0°-180°	10420.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	954	953	942	951	950	91
15°	916	913	904	912	912	258
25°	841	839	831	836	839	387
35°	742	739	733	733	736	463
45°	615	616	610	609	610	475
55°	477	477	470	467	468	425
65°	322	321	316	312	312	319
75°	165	164	160	157	156	174
85°	27	29	31	32	32	38
90°	3	8	17	18	17	7
95°	87	307	936	485	288	91
105°	283	437	1689	2491	2389	298
115°	498	609	1401	2711	3061	492
125°	682	782	1262	2130	2503	608
135°	818	915	1228	1720	1947	632
145°	951	1022	1212	1472	1584	595
155°	1073	1115	1201	1321	1364	495
165°	1169	1180	1206	1254	1260	329
175°	1213	1212	1208	1223	1221	115
180°	1212	1212	1212	1212	1212	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.1	955.1	955.1	955.1	955.1
2.5°	958.2	956.2	948.0	955.1	954.1
5°	953.9	952.6	942.4	951.2	950.1
7.5°	947.0	944.4	934.4	943.1	941.9
10°	939.8	937.3	928.3	936.0	934.7
12.5°	930.6	929.1	919.1	926.8	926.5
15°	915.6	913.0	904.0	911.7	911.7
17.5°	895.5	894.1	885.3	892.7	891.7
20°	882.2	879.8	872.1	878.4	878.4
22.5°	865.9	864.4	856.7	862.1	863.1
25°	841.3	838.8	831.1	836.3	838.7
27.5°	814.3	812.2	805.8	809.2	810.9
30°	792.8	792.8	786.4	787.8	791.5
32.5°	773.4	773.4	765.9	767.3	768.9
35°	741.6	739.1	732.6	732.7	736.5
37.5°	704.8	703.6	699.4	698.7	699.7
40°	680.3	679.0	673.9	675.2	675.2
42.5°	655.7	654.4	649.3	647.5	649.5
45°	615.0	616.3	609.9	608.7	609.9
47.5°	574.9	574.9	569.7	566.2	568.3
50°	547.3	547.3	542.1	539.6	539.6
52.5°	518.6	519.7	513.5	510.0	511.0
55°	477.0	477.0	470.5	466.7	468.0
57.5°	430.9	430.9	424.5	420.8	423.0
60°	400.2	400.2	393.8	390.0	391.3
62.5°	369.6	369.6	363.2	359.3	359.5
65°	322.2	321.0	315.8	312.0	312.0
67.5°	276.7	273.4	269.5	264.5	264.5
70°	243.0	241.7	237.8	232.7	232.7
72.5°	212.3	210.0	206.1	202.0	202.0
75°	165.0	163.7	159.8	157.3	156.0
77.5°	118.1	117.1	116.8	113.3	114.3
80°	89.5	89.5	88.3	85.7	85.7
82.5°	63.9	65.0	62.6	62.1	61.1
85°	26.8	29.4	30.7	31.9	31.9
87.5°	5.6	9.7	10.5	11.7	11.5
90°	2.6	7.7	17.0	18.2	17.0
92.5°	37.0	135.0	266.3	115.6	83.7
95°	87.4	306.7	936.4	484.6	288.2
97.5°	140.3	351.8	1459.6	1207.9	887.1
100°	180.0	370.0	1622.4	1692.0	1368.0
102.5°	216.5	395.3	1679.8	2059.0	1816.7
105°	283.0	437.3	1688.8	2491.2	2389.2
107.5°	344.6	485.3	1615.1	2760.9	2794.8
110°	392.5	520.1	1549.3	2833.3	2977.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	435.3	554.7	1488.9	2818.9	3060.8
115°	498.2	609.1	1400.6	2711.4	3060.8
117.5°	559.7	663.7	1342.5	2547.5	2943.5
120°	597.3	699.4	1308.1	2429.7	2834.0
122.5°	632.8	732.8	1287.2	2303.5	2710.8
125°	682.1	781.6	1262.4	2130.3	2502.7
127.5°	727.4	825.1	1247.8	1988.9	2316.5
130°	752.5	853.3	1241.6	1901.6	2197.5
132.5°	778.5	878.3	1235.3	1822.8	2095.3
135°	817.7	914.6	1228.5	1720.1	1947.1
137.5°	857.1	948.6	1222.8	1636.7	1821.6
140°	884.3	969.7	1220.7	1583.1	1747.6
142.5°	910.3	990.6	1216.5	1534.6	1678.7
145°	950.8	1022.2	1211.6	1472.4	1584.5
147.5°	987.5	1050.8	1205.8	1415.9	1502.1
150°	1014.6	1070.8	1203.8	1385.2	1454.2
152.5°	1039.7	1088.7	1202.7	1356.9	1413.4
155°	1073.3	1115.4	1201.1	1320.8	1364.1
157.5°	1108.3	1137.6	1201.3	1295.7	1324.3
160°	1128.1	1152.4	1202.5	1279.8	1300.2
162.5°	1143.7	1163.9	1203.5	1267.2	1282.5
165°	1168.6	1180.0	1206.4	1253.5	1259.8
167.5°	1185.5	1193.4	1206.6	1241.6	1244.7
170°	1195.9	1199.7	1207.7	1236.4	1236.4
172.5°	1204.3	1205.1	1207.7	1230.0	1229.0
175°	1212.8	1211.6	1207.7	1223.3	1220.7
177.5°	1215.7	1212.7	1207.4	1217.7	1214.7
180°	1211.6	1211.6	1211.6	1211.6	1211.6

(END OF REPORT)