

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: P520457

Luminaire Tested: **SQ4-F-150U-125D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520457  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-125D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

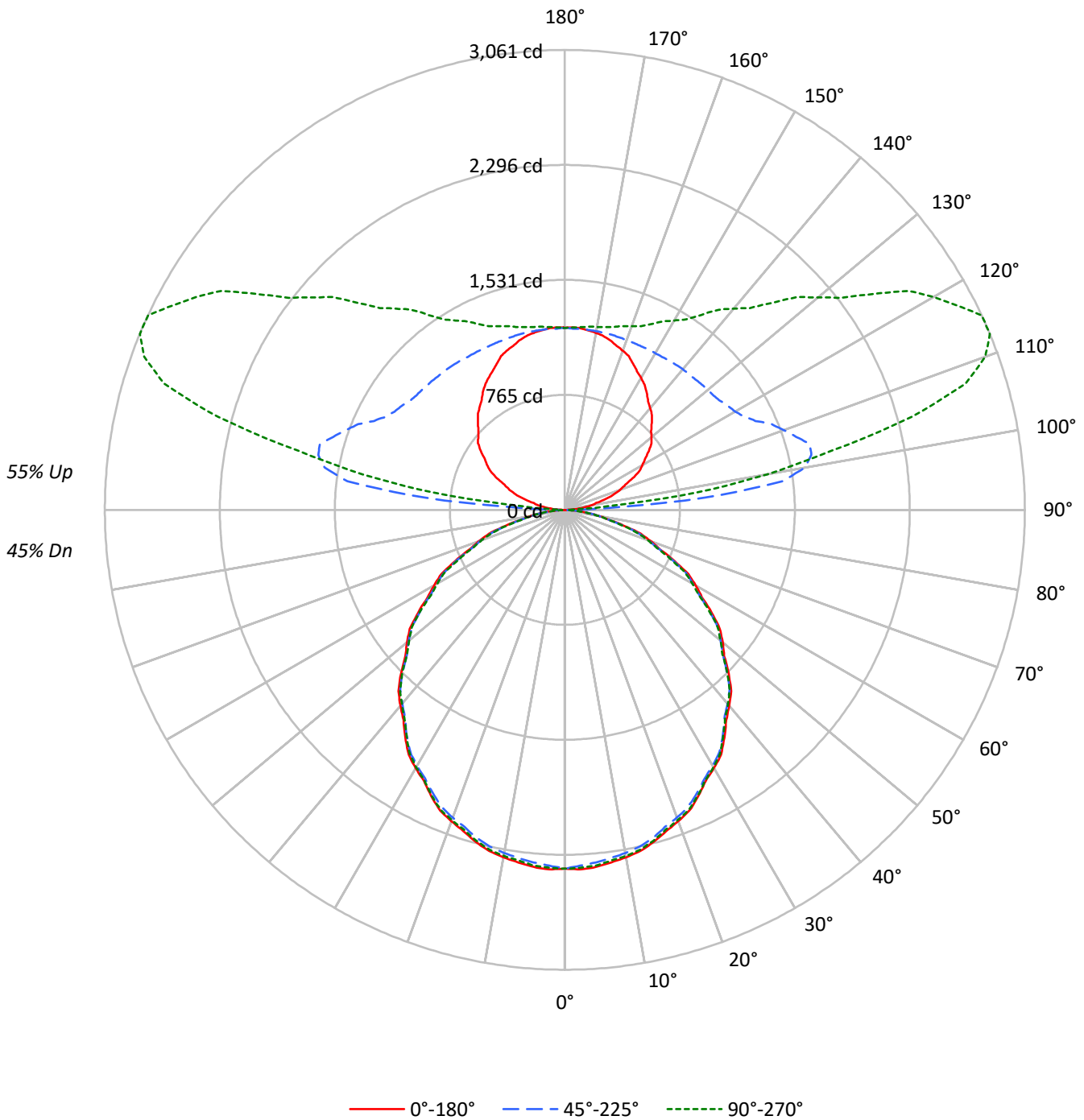
Lumens per Lamp: N/A  
Luminaire Lumens: 14329.0 lumens  
Efficiency: N/A  
Efficacy: 115.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 124.4  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14687	14687	14687
5°	14736	14549	14671
10°	14668	14487	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14119	14236
30°	14095	13973	14048
35°	13895	13776	13786
40°	13666	13518	13560
45°	13411	13261	13284
50°	13117	12966	12928
55°	12783	12600	12571
60°	12368	12092	12029
65°	11725	11476	11324
70°	10920	10636	10494
75°	9715	9494	9214
80°	7913	7683	7637
85°	4728	5378	5378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.3	1.6
10°-20°	641.7	4.5
20°-30°	964.1	6.7
30°-40°	1150.4	8.0
40°-50°	1179.1	8.2
50°-60°	1051.0	7.3
60°-70°	782.4	5.5
70°-80°	423.9	3.0
80°-90°	99.8	0.7
90°-100°	563.1	3.9
100°-110°	1522.4	10.6
110°-120°	1600.6	11.2
120°-130°	1300.1	9.1
130°-140°	1019.8	7.1
140°-150°	782.7	5.5
150°-160°	562.9	3.9
160°-170°	343.9	2.4
170°-180°	115.9	0.8
0°-30°	1831.1	12.8
0°-40°	2981.5	20.8
0°-60°	5211.6	36.4
0°-90°	6517.6	45.5
90°-120°	3686.0	25.7
90°-150°	6788.7	47.4
90°-180°	7811.0	54.5
0°-180°	14329.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2388	2388	2388	2388	2388	
5°	2387	2383	2356	2377	2376	226
15°	2288	2283	2260	2280	2279	645
25°	2103	2099	2080	2092	2098	968
35°	1850	1849	1835	1835	1836	1157
45°	1542	1538	1524	1522	1527	1188
55°	1192	1188	1175	1166	1172	1065
65°	806	800	788	783	778	798
75°	409	409	400	392	388	434
85°	67	76	76	78	76	93
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°	2387.9	2387.9	2387.9	2387.9	2387.9
2.5°	2395.3	2391.2	2370.1	2387.9	2384.8
5°	2386.6	2382.8	2356.4	2377.4	2376.2
7.5°	2366.5	2361.6	2337.5	2357.1	2354.9
10°	2348.5	2344.7	2319.6	2339.3	2338.1
12.5°	2326.5	2322.7	2297.5	2317.3	2317.0
15°	2288.1	2282.9	2260.5	2280.2	2278.9
17.5°	2242.1	2236.2	2214.0	2229.5	2232.1
20°	2205.3	2201.5	2180.4	2194.9	2197.4
22.5°	2167.5	2162.5	2140.3	2157.0	2159.6
25°	2102.8	2098.9	2080.4	2092.4	2097.6
27.5°	2031.8	2031.8	2014.8	2023.2	2026.3
30°	1984.5	1984.5	1967.4	1972.8	1978.0
32.5°	1934.1	1929.9	1913.8	1918.1	1923.3
35°	1850.5	1849.2	1834.7	1834.8	1836.0
37.5°	1764.0	1760.4	1744.6	1745.7	1751.9
40°	1702.0	1699.4	1683.6	1683.7	1688.8
42.5°	1638.9	1636.3	1622.5	1620.5	1622.5
45°	1541.7	1537.7	1524.5	1522.0	1527.2
47.5°	1438.1	1439.1	1423.3	1419.7	1422.6
50°	1370.8	1370.8	1355.0	1347.2	1351.0
52.5°	1300.3	1298.2	1282.4	1273.7	1282.7
55°	1192.0	1188.1	1175.0	1165.8	1172.3
57.5°	1081.1	1075.1	1061.9	1052.0	1055.6
60°	1005.4	996.4	983.0	975.2	977.8
62.5°	926.6	921.7	907.4	895.4	901.0
65°	805.6	800.5	788.5	783.1	778.1
67.5°	687.1	683.7	670.2	664.7	661.3
70°	607.2	600.7	591.4	584.8	583.5
72.5°	529.4	522.0	512.5	507.0	503.6
75°	408.8	408.8	399.5	391.5	387.7
77.5°	293.8	294.9	287.3	284.6	282.9
80°	223.4	223.4	216.9	214.3	215.6
82.5°	156.2	159.2	156.9	153.2	151.4
85°	67.0	76.0	76.2	77.5	76.2
87.5°	12.1	20.3	23.4	21.5	19.2
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)