

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: P520453

Luminaire Tested: **SQ4-F-150U-125D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520453  
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-935-1D-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**

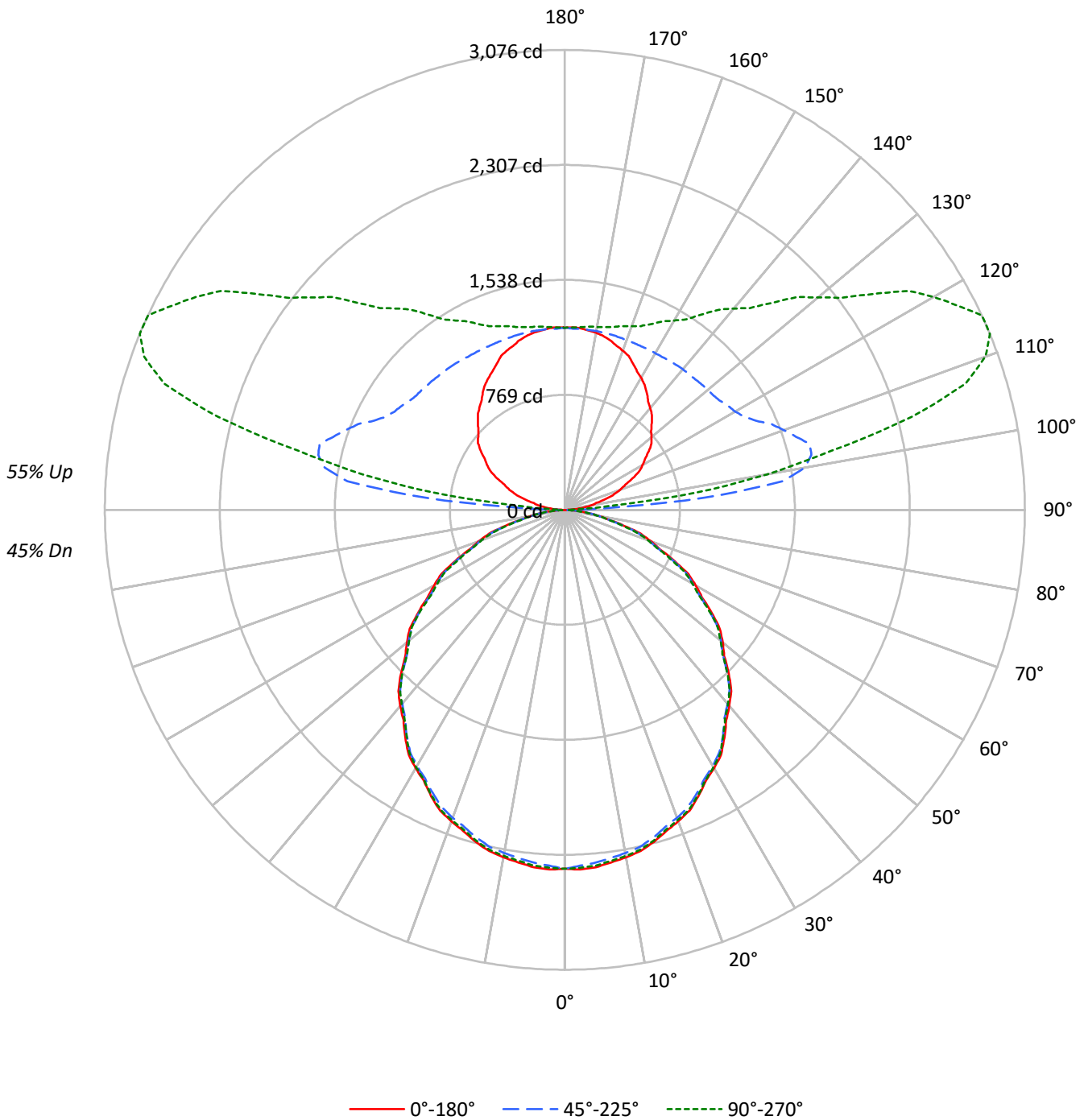
Lumens per Lamp: N/A  
Luminaire Lumens: 14402.2 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

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°	14763	14763	14763
5°	14812	14624	14746
10°	14744	14562	14677
15°	14645	14468	14586
20°	14509	14344	14457
25°	14344	14192	14308
30°	14166	14045	14119
35°	13966	13847	13857
40°	13735	13587	13629
45°	13478	13329	13352
50°	13184	13032	12994
55°	12848	12665	12636
60°	12432	12155	12090
65°	11784	11536	11381
70°	10974	10690	10547
75°	9763	9544	9261
80°	7956	7722	7672
85°	4757	5406	5406



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	226.5	1.6
10°-20°	645.0	4.5
20°-30°	969.0	6.7
30°-40°	1156.2	8.0
40°-50°	1185.2	8.2
50°-60°	1056.4	7.3
60°-70°	786.4	5.5
70°-80°	426.0	3.0
80°-90°	100.3	0.7
90°-100°	565.9	3.9
100°-110°	1530.2	10.6
110°-120°	1608.7	11.2
120°-130°	1306.7	9.1
130°-140°	1025.0	7.1
140°-150°	786.7	5.5
150°-160°	565.8	3.9
160°-170°	345.6	2.4
170°-180°	116.5	0.8
0°-30°	1840.4	12.8
0°-40°	2996.7	20.8
0°-60°	5238.2	36.4
0°-90°	6550.9	45.5
90°-120°	3704.8	25.7
90°-150°	6823.3	47.4
90°-180°	7851.0	54.5
0°-180°	14402.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2400	2400	2400	2400	2400	
5°	2399	2395	2368	2390	2388	228
15°	2300	2295	2272	2292	2291	648
25°	2114	2110	2091	2103	2108	973
35°	1860	1859	1844	1844	1845	1163
45°	1550	1546	1532	1530	1535	1194
55°	1198	1194	1181	1172	1178	1070
65°	810	804	793	787	782	802
75°	411	411	402	394	390	436
85°	67	76	77	78	77	93
90°	3	8	17	18	17	7
95°	88	308	941	487	290	92
105°	284	440	1698	2504	2401	300
115°	501	612	1408	2725	3076	494
125°	686	786	1269	2141	2516	611
135°	822	919	1235	1729	1957	635
145°	956	1027	1218	1480	1593	598
155°	1079	1121	1207	1328	1371	498
165°	1174	1186	1212	1260	1266	331
175°	1219	1218	1214	1230	1227	116
180°	1218	1218	1218	1218	1218	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2400.2	2400.2	2400.2	2400.2	2400.2
2.5°	2407.6	2403.5	2382.2	2400.1	2397.0
5°	2398.9	2394.9	2368.5	2389.6	2388.3
7.5°	2378.5	2373.6	2349.4	2369.2	2366.9
10°	2360.6	2356.6	2331.5	2351.3	2349.9
12.5°	2338.4	2334.4	2309.3	2329.1	2328.9
15°	2299.8	2294.6	2272.0	2291.9	2290.6
17.5°	2253.6	2247.6	2225.3	2240.9	2243.5
20°	2216.6	2212.7	2191.4	2206.0	2208.7
22.5°	2178.6	2173.6	2151.3	2168.0	2170.5
25°	2113.5	2109.6	2091.1	2103.0	2108.2
27.5°	2042.2	2042.2	2025.0	2033.5	2036.7
30°	1994.6	1994.6	1977.5	1982.8	1988.0
32.5°	1943.9	1939.8	1923.6	1927.9	1933.1
35°	1859.9	1858.6	1844.1	1844.1	1845.4
37.5°	1772.9	1769.4	1753.5	1754.6	1760.8
40°	1710.6	1708.1	1692.2	1692.3	1697.4
42.5°	1647.3	1644.6	1630.9	1628.8	1630.9
45°	1549.5	1545.6	1532.3	1529.8	1535.0
47.5°	1445.4	1446.4	1430.6	1426.9	1429.8
50°	1377.8	1377.8	1361.9	1354.1	1357.9
52.5°	1306.9	1304.9	1289.0	1280.2	1289.3
55°	1198.1	1194.2	1181.0	1171.8	1178.3
57.5°	1086.6	1080.7	1067.3	1057.4	1061.0
60°	1010.6	1001.5	988.1	980.2	982.8
62.5°	931.3	926.4	912.0	900.0	905.7
65°	809.7	804.5	792.6	787.2	782.0
67.5°	690.6	687.3	673.7	668.1	664.7
70°	610.2	603.9	594.4	587.8	586.5
72.5°	532.1	524.6	515.2	509.6	506.2
75°	410.8	410.8	401.6	393.5	389.7
77.5°	295.3	296.4	288.8	286.1	284.3
80°	224.6	224.6	218.0	215.4	216.6
82.5°	156.9	160.0	157.7	154.0	152.1
85°	67.4	76.4	76.6	77.9	76.6
87.5°	12.2	20.4	23.5	21.6	19.3
90°	2.6	7.7	17.0	18.3	17.0
92.5°	37.2	135.7	267.7	116.2	84.2
95°	87.8	308.2	941.2	487.1	289.7
97.5°	141.0	353.5	1467.0	1214.1	891.6
100°	180.9	371.9	1630.6	1700.6	1375.1
102.5°	217.6	397.3	1688.3	2069.5	1826.0
105°	284.5	439.5	1697.5	2503.9	2401.4
107.5°	346.4	487.8	1623.4	2775.0	2809.1
110°	394.5	522.7	1557.3	2847.7	2992.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	437.5	557.5	1496.4	2833.3	3076.5
115°	500.8	612.2	1407.8	2725.3	3076.5
117.5°	562.6	667.2	1349.3	2560.4	2958.5
120°	600.4	702.9	1314.7	2442.1	2848.3
122.5°	636.0	736.5	1293.8	2315.3	2724.6
125°	685.6	785.6	1268.9	2141.2	2515.5
127.5°	731.2	829.3	1254.2	1999.1	2328.3
130°	756.3	857.6	1247.9	1911.4	2208.7
132.5°	782.6	882.8	1241.6	1832.2	2105.9
135°	821.9	919.3	1234.7	1728.9	1957.0
137.5°	861.4	953.5	1229.0	1645.1	1830.9
140°	888.7	974.6	1226.9	1591.2	1756.5
142.5°	914.9	995.7	1222.7	1542.5	1687.2
145°	955.6	1027.3	1217.7	1479.8	1592.7
147.5°	992.5	1056.1	1212.0	1423.2	1509.8
150°	1019.8	1076.2	1209.9	1392.4	1461.6
152.5°	1045.0	1094.2	1208.8	1363.7	1420.7
155°	1078.8	1121.1	1207.3	1327.5	1371.2
157.5°	1113.9	1143.4	1207.5	1302.2	1331.0
160°	1133.8	1158.2	1208.6	1286.4	1306.9
162.5°	1149.5	1169.9	1209.6	1273.7	1289.1
165°	1174.5	1186.1	1212.5	1259.8	1266.2
167.5°	1191.5	1199.4	1212.7	1247.9	1251.0
170°	1202.1	1205.9	1213.8	1242.7	1242.7
172.5°	1210.4	1211.2	1213.8	1236.4	1235.4
175°	1219.1	1217.7	1213.8	1229.5	1226.9
177.5°	1222.0	1218.9	1213.5	1224.0	1220.9
180°	1217.7	1217.7	1217.7	1217.7	1217.7

(END OF REPORT)