

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: P520396

Luminaire Tested: **SQ4-F-150U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520396  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-075D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

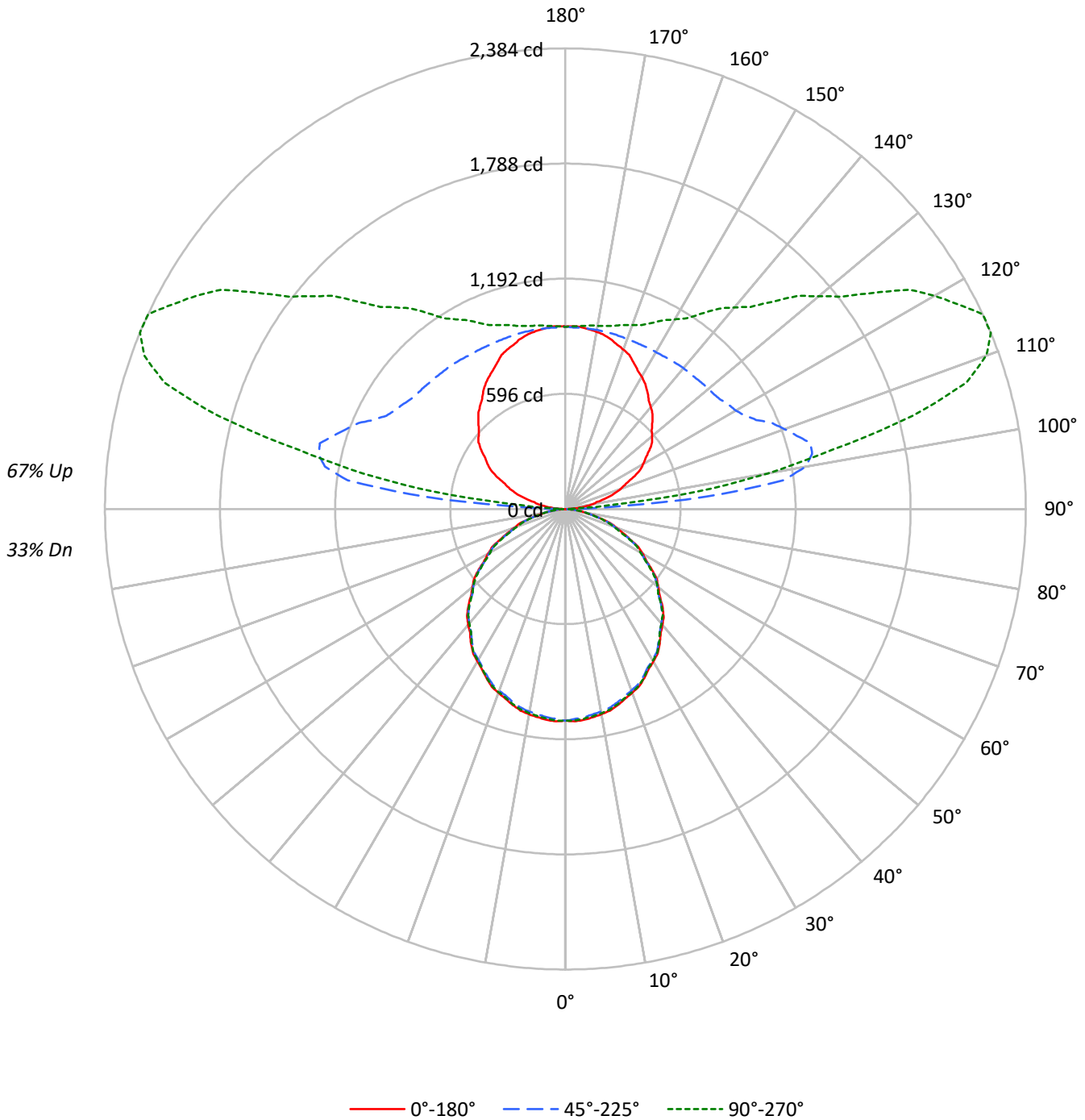
Lumens per Lamp: N/A  
Luminaire Lumens: 9079.4 lumens  
Efficiency: N/A  
Efficacy: 143.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63.5  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	10115	10115	10115
5°	10153	10026	10098
10°	10112	9982	10057
15°	10035	9912	9997
20°	9945	9827	9906
25°	9836	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8792	8683	8601
60°	8510	8364	8289
65°	8049	7898	7789
70°	7561	7375	7186
75°	6802	6556	6413
80°	5435	5334	5281
85°	3260	3684	3790



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.5	1.1
10°-20°	294.6	3.2
20°-30°	442.6	4.9
30°-40°	528.1	5.8
40°-50°	541.6	6.0
50°-60°	482.6	5.3
60°-70°	359.8	4.0
70°-80°	195.1	2.1
80°-90°	46.8	0.5
90°-100°	438.6	4.8
100°-110°	1185.8	13.1
110°-120°	1246.7	13.7
120°-130°	1012.7	11.2
130°-140°	794.4	8.7
140°-150°	609.7	6.7
150°-160°	438.5	4.8
160°-170°	267.9	3.0
170°-180°	90.3	1.0
0°-30°	840.7	9.3
0°-40°	1368.8	15.1
0°-60°	2393.1	26.4
0°-90°	2994.8	33.0
90°-120°	2871.2	31.6
90°-150°	5287.9	58.2
90°-180°	6085.0	67.0
0°-180°	9079.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1096	1094	1082	1091	1090	104
15°	1051	1049	1038	1046	1047	296
25°	966	965	956	961	963	445
35°	851	849	842	842	846	532
45°	710	707	701	701	703	546
55°	547	546	540	535	535	488
65°	369	369	362	358	357	367
75°	191	187	184	181	180	200
85°	31	33	35	35	36	43
90°	2	6	13	14	13	5
95°	68	239	729	377	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1096.3	1096.3	1096.3	1096.3	1096.3
2.5°	1100.3	1098.0	1088.4	1096.3	1095.6
5°	1096.3	1094.4	1082.5	1091.3	1090.3
7.5°	1087.4	1085.2	1073.5	1082.5	1082.3
10°	1079.4	1076.6	1065.5	1074.5	1073.5
12.5°	1069.1	1066.2	1055.2	1064.2	1063.2
15°	1050.6	1048.7	1037.7	1045.7	1046.6
17.5°	1029.5	1025.9	1016.0	1023.8	1024.8
20°	1012.9	1009.9	1000.9	1007.9	1008.9
22.5°	995.4	992.4	983.5	990.4	991.3
25°	966.2	965.2	956.2	961.2	963.2
27.5°	934.6	931.8	924.6	928.4	930.3
30°	911.4	909.6	901.5	904.5	906.5
32.5°	887.6	886.4	879.3	880.7	883.4
35°	850.8	848.9	841.9	842.0	845.9
37.5°	810.1	807.9	802.1	801.1	802.7
40°	782.2	779.4	774.3	773.3	773.3
42.5°	753.6	751.5	744.8	743.2	745.4
45°	709.7	706.8	700.7	700.7	702.7
47.5°	662.2	661.0	654.0	650.9	651.6
50°	627.2	629.1	622.2	618.3	622.2
52.5°	596.9	595.8	589.6	585.7	587.2
55°	546.6	545.7	539.8	534.7	534.7
57.5°	496.2	493.7	487.4	483.8	486.6
60°	461.2	460.2	453.3	446.4	449.2
62.5°	426.2	424.4	417.4	412.9	415.1
65°	368.7	368.7	361.8	357.8	356.8
67.5°	318.4	313.8	309.9	305.2	303.8
70°	280.3	276.4	273.4	269.3	266.4
72.5°	243.0	240.6	236.0	231.9	231.4
75°	190.8	187.0	183.9	180.9	179.9
77.5°	135.8	135.0	132.2	130.6	131.2
80°	102.3	102.3	100.4	100.4	99.4
82.5°	72.1	72.9	72.5	71.0	70.8
85°	30.8	32.8	34.8	34.8	35.8
87.5°	6.0	10.6	11.3	11.5	11.3
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.3	377.4	224.5
97.5°	109.4	274.0	1137.0	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.1
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.9	2206.9	2319.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.0	474.4	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.7
120°	465.3	544.7	1018.9	1892.6	2207.4
122.5°	492.9	570.8	1002.7	1794.3	2111.6
125°	531.3	608.7	983.4	1659.4	1949.4
127.5°	566.7	642.7	972.0	1549.3	1804.3
130°	586.2	664.7	967.1	1481.3	1711.7
132.5°	606.5	684.2	962.2	1419.9	1632.1
135°	637.0	712.4	956.9	1339.9	1516.6
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.8	755.3	950.9	1233.1	1361.2
142.5°	709.0	771.7	947.6	1195.4	1307.6
145°	740.6	796.1	943.7	1146.8	1234.2
147.5°	769.2	818.5	939.3	1103.0	1170.1
150°	790.3	834.1	937.7	1079.0	1132.6
152.5°	809.8	847.9	936.8	1056.9	1101.0
155°	836.1	868.9	935.6	1028.8	1062.6
157.5°	863.2	886.1	935.8	1009.2	1031.5
160°	878.7	897.5	936.6	996.9	1012.8
162.5°	890.9	906.6	937.5	987.1	998.9
165°	910.2	919.2	939.7	976.3	981.3
167.5°	923.4	929.5	939.9	967.2	969.6
170°	931.5	934.6	940.7	963.0	963.0
172.5°	938.1	938.7	940.7	958.1	957.3
175°	944.7	943.7	940.7	952.9	950.9
177.5°	946.9	944.6	940.5	948.5	946.1
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)