

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: P520381

Luminaire Tested: **SQ4-F-150U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520381
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-935-1D-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

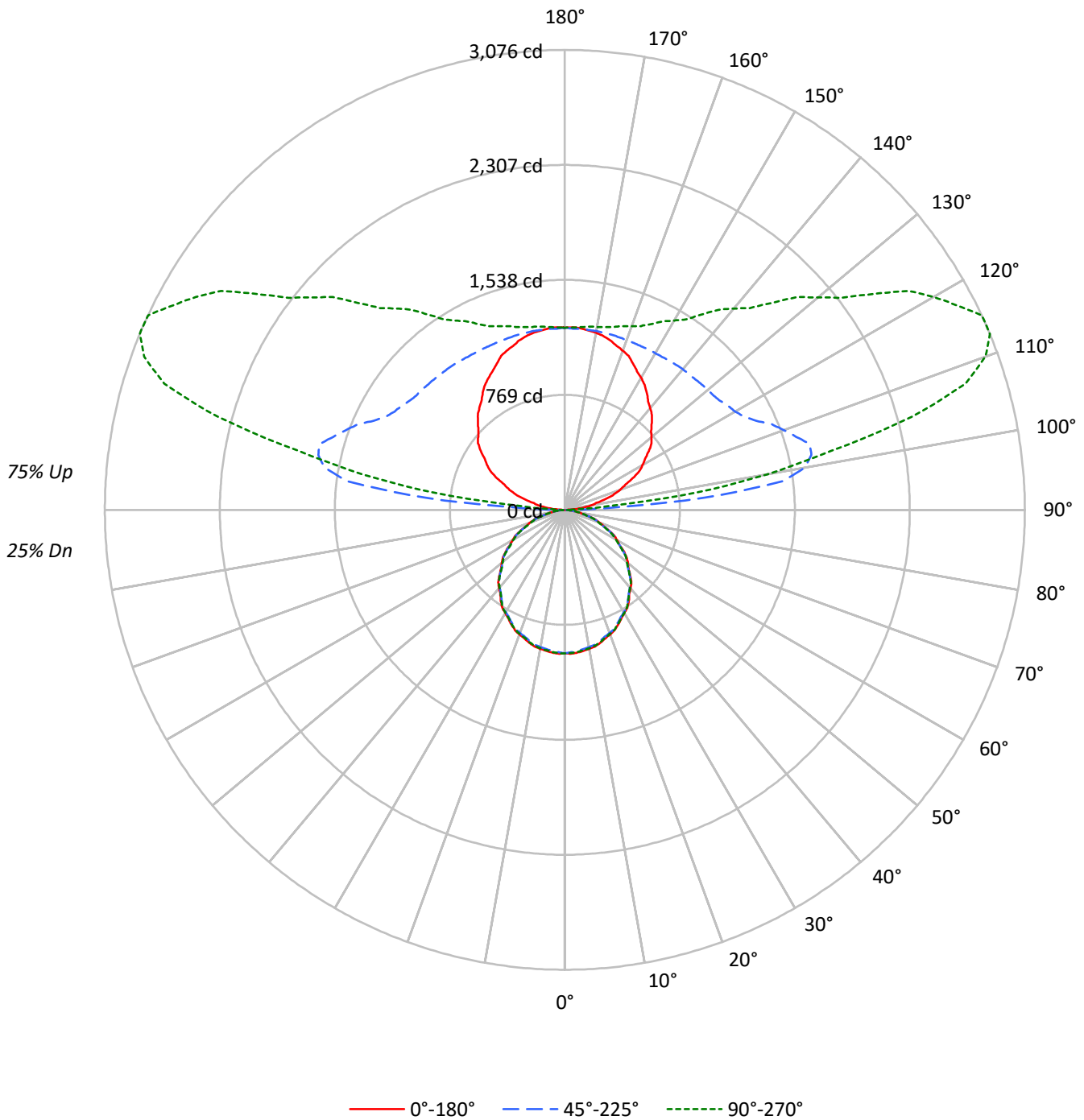
Lumens per Lamp: N/A
Luminaire Lumens: 10473.9 lumens
Efficiency: N/A
Efficacy: 124.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5867
15°	5860	5786	5835
20°	5805	5737	5779
25°	5739	5670	5722
30°	5659	5614	5651
35°	5597	5529	5558
40°	5490	5438	5449
45°	5377	5332	5332
50°	5263	5214	5189
55°	5140	5071	5043
60°	4948	4869	4837
65°	4713	4619	4564
70°	4390	4298	4206
75°	3940	3817	3726
80°	3184	3138	3050
85°	1905	2181	2265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	0.9
10°-20°	257.9	2.5
20°-30°	387.4	3.7
30°-40°	462.5	4.4
40°-50°	473.9	4.5
50°-60°	422.6	4.0
60°-70°	314.7	3.0
70°-80°	170.9	1.6
80°-90°	42.1	0.4
90°-100°	565.9	5.4
100°-110°	1530.2	14.6
110°-120°	1608.7	15.4
120°-130°	1306.7	12.5
130°-140°	1025.0	9.8
140°-150°	786.7	7.5
150°-160°	565.8	5.4
160°-170°	345.6	3.3
170°-180°	116.5	1.1
0°-30°	735.9	7.0
0°-40°	1198.4	11.4
0°-60°	2095.0	20.0
0°-90°	2622.6	25.0
90°-120°	3704.8	35.4
90°-150°	6823.3	65.1
90°-180°	7851.0	75.0
0°-180°	10473.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	958	947	956	955	91
15°	920	918	909	916	916	259
25°	846	843	835	840	843	389
35°	745	743	736	736	740	465
45°	618	619	613	612	613	477
55°	479	479	473	469	470	427
65°	324	323	317	314	314	321
75°	166	165	161	158	157	175
85°	27	30	31	32	32	38
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	

TEST NUMBER: P520381

CATALOG NUMBER: SQ4-F-150U-050D-935-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	960.0	960.0	960.0	960.0	960.0
2.5°	963.1	961.1	952.8	960.0	959.0
5°	958.7	957.5	947.2	956.2	954.9
7.5°	951.8	949.3	939.2	947.9	946.6
10°	944.6	942.1	933.0	940.7	939.4
12.5°	935.4	933.8	923.7	931.5	931.2
15°	920.2	917.6	908.7	916.3	916.3
17.5°	900.2	898.6	889.8	897.3	896.2
20°	886.8	884.3	876.5	882.9	882.9
22.5°	870.3	868.8	861.0	866.4	867.5
25°	845.6	843.1	835.4	840.5	843.1
27.5°	818.4	816.4	809.9	813.3	815.1
30°	796.8	796.8	790.4	791.7	795.6
32.5°	777.3	777.3	769.8	771.1	772.9
35°	745.4	742.9	736.4	736.5	740.2
37.5°	708.4	707.1	703.0	702.3	703.3
40°	683.7	682.4	677.3	678.6	678.6
42.5°	659.1	657.8	652.6	650.9	652.9
45°	618.2	619.4	613.0	611.7	613.0
47.5°	577.8	577.8	572.7	569.2	571.1
50°	550.0	550.0	544.9	542.3	542.3
52.5°	521.2	522.3	516.1	512.6	513.5
55°	479.3	479.3	472.9	469.1	470.3
57.5°	433.1	433.1	426.7	422.9	425.1
60°	402.2	402.2	395.8	392.0	393.2
62.5°	371.4	371.4	364.9	361.1	361.4
65°	323.8	322.6	317.4	313.6	313.6
67.5°	278.1	274.8	270.9	265.7	265.7
70°	244.1	243.0	239.0	233.9	233.9
72.5°	213.4	211.1	207.2	203.0	203.0
75°	165.8	164.6	160.6	158.1	156.8
77.5°	118.7	117.7	117.4	113.9	114.9
80°	89.9	89.9	88.6	86.1	86.1
82.5°	64.3	65.3	63.0	62.4	61.4
85°	27.0	29.5	30.9	32.1	32.1
87.5°	5.6	9.7	10.6	11.8	11.5
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



TEST NUMBER: P520381

CATALOG NUMBER: SQ4-F-150U-050D-935-1D-UNV-STD-W-6

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)