

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: P520409

Luminaire Tested: **SQ4-F-150U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520409
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-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

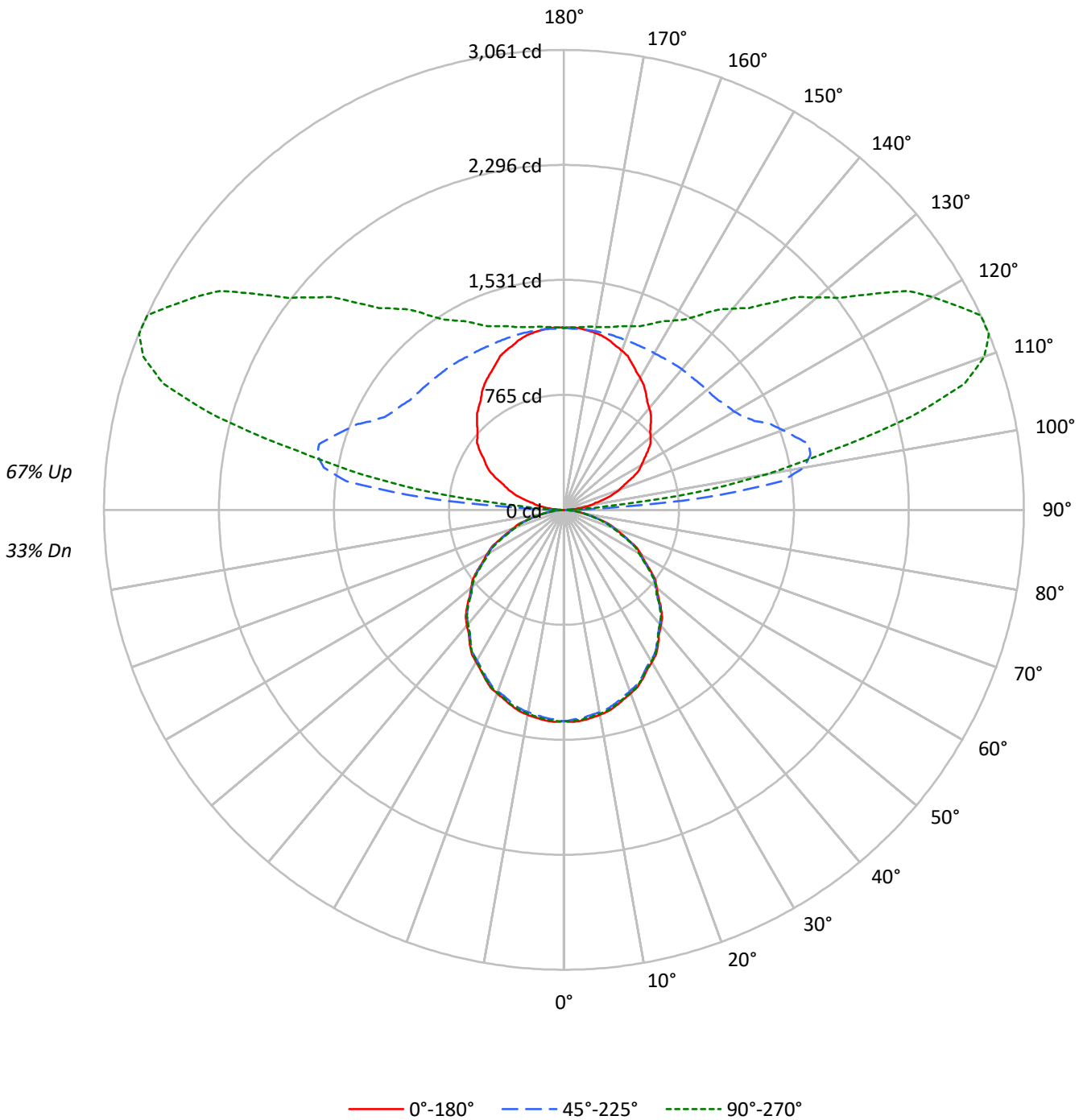
Lumens per Lamp: N/A
Luminaire Lumens: 11656.3 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 96.9
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°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8543	8608
15°	8589	8483	8556
20°	8511	8411	8478
25°	8417	8331	8392
30°	8310	8220	8266
35°	8202	8115	8154
40°	8063	7981	7971
45°	7925	7825	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7096
65°	6890	6760	6667
70°	6472	6310	6150
75°	5822	5611	5490
80°	4658	4566	4520
85°	2795	3155	3246



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.9	1.1
10°-20°	378.2	3.2
20°-30°	568.2	4.9
30°-40°	678.0	5.8
40°-50°	695.3	6.0
50°-60°	619.6	5.3
60°-70°	462.0	4.0
70°-80°	250.5	2.1
80°-90°	60.1	0.5
90°-100°	563.1	4.8
100°-110°	1522.4	13.1
110°-120°	1600.6	13.7
120°-130°	1300.1	11.2
130°-140°	1019.8	8.7
140°-150°	782.7	6.7
150°-160°	562.9	4.8
160°-170°	343.9	3.0
170°-180°	115.9	1.0
0°-30°	1079.3	9.3
0°-40°	1757.3	15.1
0°-60°	3072.2	26.4
0°-90°	3844.9	33.0
90°-120°	3686.0	31.6
90°-150°	6788.7	58.2
90°-180°	7811.0	67.0
0°-180°	11656.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1408	1408	1408	1408	1408	
5°	1408	1405	1390	1401	1400	134
15°	1349	1346	1332	1342	1344	380
25°	1240	1239	1228	1234	1236	571
35°	1092	1090	1081	1081	1086	682
45°	911	907	900	900	902	701
55°	702	701	693	686	686	627
65°	473	473	464	459	458	471
75°	245	240	236	232	231	257
85°	40	42	45	45	46	55
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°	1407.5	1407.5	1407.5	1407.5	1407.5
2.5°	1412.6	1409.6	1397.3	1407.5	1406.4
5°	1407.5	1404.9	1389.6	1401.1	1399.8
7.5°	1396.0	1393.2	1378.2	1389.6	1389.4
10°	1385.8	1382.0	1367.9	1379.4	1378.2
12.5°	1372.6	1368.8	1354.7	1366.1	1364.9
15°	1348.8	1346.3	1332.2	1342.5	1343.6
17.5°	1321.7	1317.0	1304.4	1314.4	1315.6
20°	1300.3	1296.6	1285.0	1293.9	1295.2
22.5°	1277.8	1274.1	1262.6	1271.5	1272.8
25°	1240.3	1239.0	1227.5	1234.0	1236.5
27.5°	1199.8	1196.2	1187.0	1191.9	1194.4
30°	1170.1	1167.7	1157.4	1161.3	1163.8
32.5°	1139.5	1138.1	1128.8	1130.7	1134.1
35°	1092.3	1089.8	1080.8	1080.9	1085.9
37.5°	1040.0	1037.2	1029.8	1028.5	1030.5
40°	1004.2	1000.5	994.0	992.8	992.8
42.5°	967.5	964.8	956.3	954.0	957.0
45°	911.1	907.4	899.6	899.6	902.2
47.5°	850.1	848.7	839.6	835.6	836.6
50°	805.2	807.7	798.8	793.8	798.8
52.5°	766.4	764.9	756.9	751.9	753.9
55°	701.8	700.6	692.9	686.5	686.5
57.5°	637.0	633.7	625.8	621.0	624.8
60°	592.1	590.8	581.9	573.0	576.8
62.5°	547.1	545.0	535.9	530.1	532.9
65°	473.4	473.4	464.5	459.4	458.1
67.5°	408.9	402.9	397.9	391.8	390.0
70°	359.9	354.9	350.9	345.7	342.0
72.5°	311.8	308.9	302.9	297.8	297.1
75°	245.0	240.0	236.1	232.2	231.0
77.5°	174.3	173.3	169.8	167.7	168.5
80°	131.5	131.5	128.9	128.8	127.6
82.5°	92.6	93.7	93.2	91.1	90.8
85°	39.6	42.0	44.7	44.7	46.0
87.5°	7.7	13.7	14.6	14.8	14.6
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)