

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: P520217

Luminaire Tested: **SQ4-F-100U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520217
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

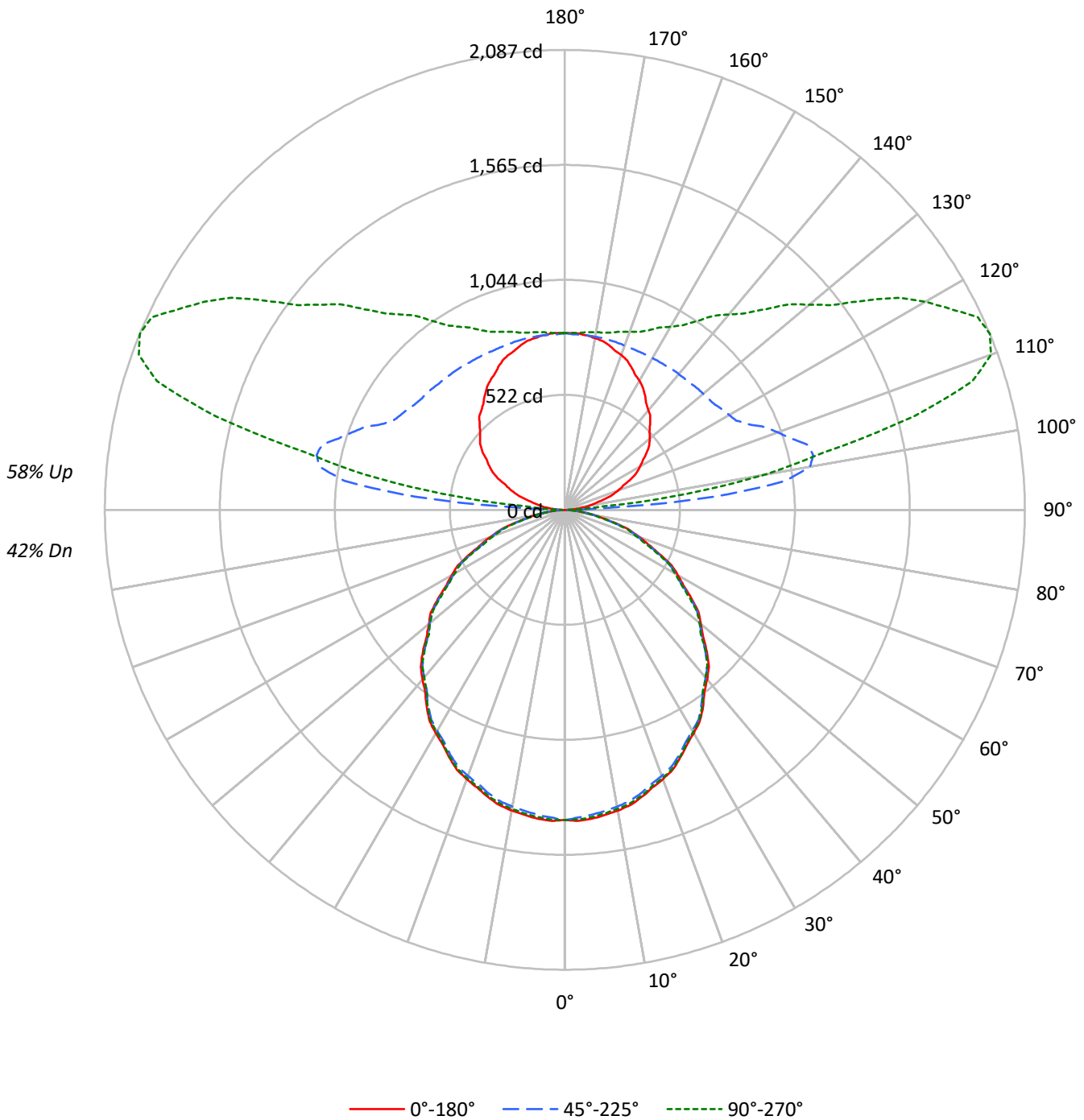
Lumens per Lamp: N/A
Luminaire Lumens: 9052.0 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

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	1.5
10°-20°	378.2	4.2
20°-30°	568.2	6.3
30°-40°	678.0	7.5
40°-50°	695.3	7.7
50°-60°	619.6	6.8
60°-70°	462.0	5.1
70°-80°	250.5	2.8
80°-90°	59.2	0.7
90°-100°	375.4	4.1
100°-110°	1036.3	11.4
110°-120°	1068.7	11.8
120°-130°	858.8	9.5
130°-140°	674.9	7.5
140°-150°	517.6	5.7
150°-160°	372.0	4.1
160°-170°	227.5	2.5
170°-180°	76.7	0.8
0°-30°	1079.3	11.9
0°-40°	1757.3	19.4
0°-60°	3072.2	33.9
0°-90°	3844.0	42.5
90°-120°	2480.4	27.4
90°-150°	4531.8	50.1
90°-180°	5208.0	57.5
0°-180°	9052.0	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	5	10	12	13	5
95°	55	203	681	280	182	59
105°	185	285	1140	1740	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1408	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	

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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	13.2	13.3	13.6	13.8
90°	2.6	5.0	10.3	11.6	12.9
92.5°	23.0	95.9	171.3	62.5	48.8
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.6	562.5
100°	118.0	242.2	1129.9	1137.8	924.6
102.5°	143.6	258.8	1153.4	1405.9	1203.8
105°	184.7	285.0	1140.1	1740.5	1639.0
107.5°	228.3	317.5	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.9
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.0	876.9	1689.1	1973.0
120°	395.0	462.8	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.5	1653.1
127.5°	483.2	545.9	823.6	1314.0	1524.9
130°	502.7	565.4	819.5	1256.0	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.3	1140.9	1286.3
137.5°	574.5	628.3	806.2	1085.0	1209.1
140°	590.0	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.5	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.0	796.1	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.2
152.5°	691.5	720.8	794.1	894.3	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.9	854.8	873.6
160°	747.7	764.0	793.8	845.5	859.2
162.5°	757.9	772.3	794.8	837.2	848.0
165°	773.4	783.4	796.4	827.4	833.6
167.5°	785.1	791.2	797.7	821.3	823.3
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.6	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.6	801.6	801.6	801.6	801.6

(END OF REPORT)