

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: P519930

Luminaire Tested: **SQ4-F-050U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

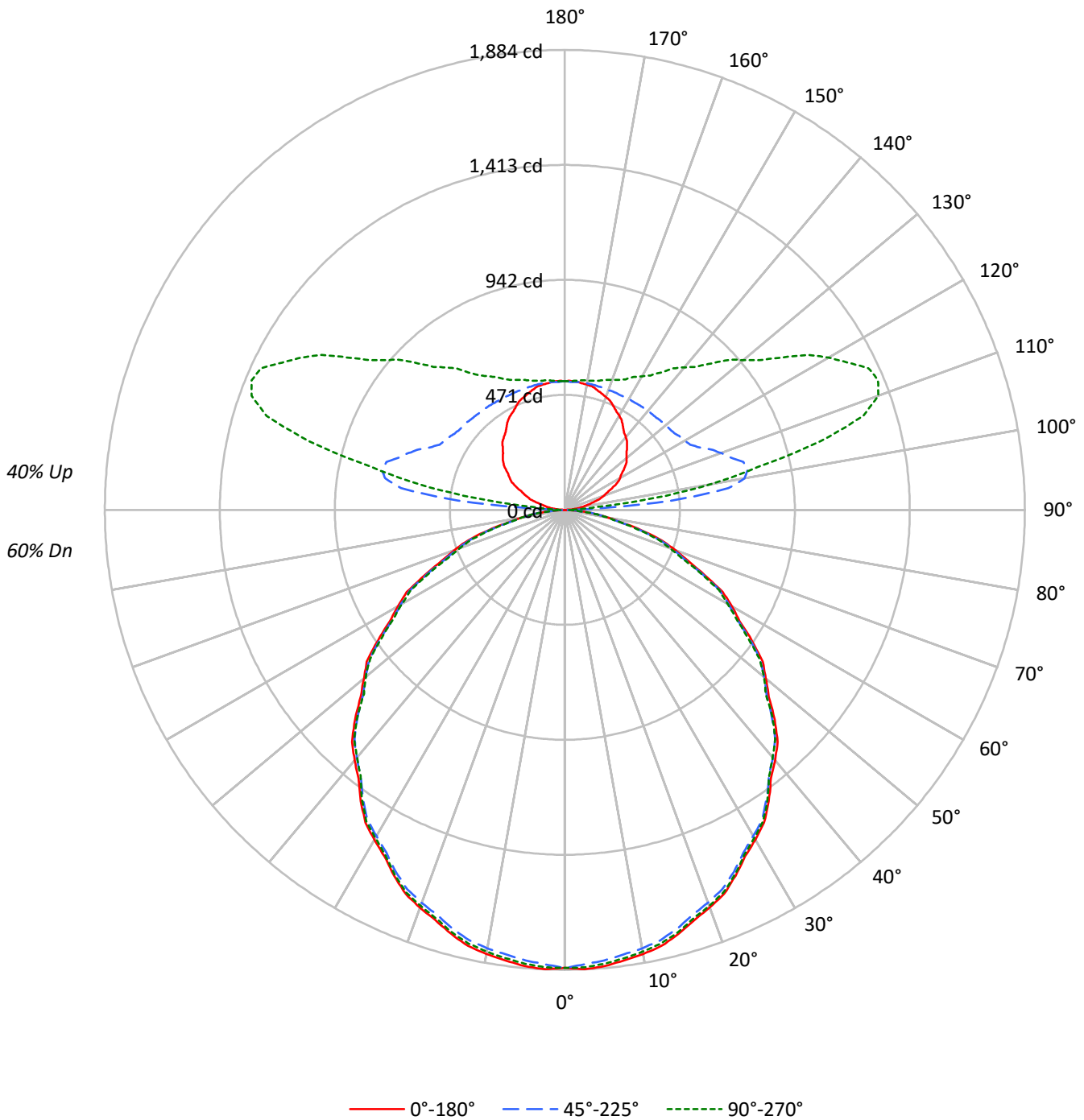
Lumens per Lamp: N/A
Luminaire Lumens: 8569.1 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8656	8544	8607
15°	8589	8483	8556
20°	8511	8411	8478
25°	8418	8331	8392
30°	8311	8220	8266
35°	8202	8116	8153
40°	8063	7982	7971
45°	7925	7825	7848
50°	7705	7643	7643
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6760	6667
70°	6471	6311	6150
75°	5823	5611	5488
80°	4657	4564	4519
85°	2789	3149	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.1	2.1
10°-20°	504.3	5.9
20°-30°	757.6	8.8
30°-40°	904.0	10.5
40°-50°	927.1	10.8
50°-60°	826.1	9.6
60°-70°	616.0	7.2
70°-80°	334.0	3.9
80°-90°	78.8	0.9
90°-100°	253.2	3.0
100°-110°	687.8	8.0
110°-120°	707.2	8.3
120°-130°	565.4	6.6
130°-140°	444.3	5.2
140°-150°	340.7	4.0
150°-160°	245.0	2.9
160°-170°	149.8	1.7
170°-180°	50.5	0.6
0°-30°	1439.1	16.8
0°-40°	2343.1	27.3
0°-60°	4096.3	47.8
0°-90°	5125.1	59.8
90°-120°	1648.3	19.2
90°-150°	2998.7	35.0
90°-180°	3444.0	40.2
0°-180°	8569.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1877	1877	1877	1877	1877	
5°	1877	1873	1853	1868	1866	178
15°	1798	1795	1776	1790	1792	507
25°	1654	1652	1637	1645	1649	762
35°	1456	1453	1441	1441	1448	910
45°	1215	1210	1200	1200	1203	935
55°	936	934	924	915	915	836
65°	631	631	619	612	611	628
75°	327	320	315	310	308	343
85°	53	56	60	60	61	73
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	516	524	546	548	144
175°	527	529	526	532	531	50
180°	527	527	527	527	527	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1876.6	1876.6	1876.6	1876.6	1876.6
2.5°	1883.5	1879.5	1863.0	1876.6	1875.3
5°	1876.6	1873.4	1852.8	1868.1	1866.5
7.5°	1861.4	1857.7	1837.5	1852.8	1852.5
10°	1847.8	1842.8	1823.9	1839.2	1837.5
12.5°	1830.1	1825.0	1806.2	1821.5	1819.8
15°	1798.4	1795.0	1776.2	1789.9	1791.6
17.5°	1762.4	1756.0	1739.1	1752.5	1754.2
20°	1733.7	1728.7	1713.3	1725.3	1726.9
22.5°	1703.8	1698.8	1683.3	1695.3	1697.0
25°	1653.8	1652.1	1636.8	1645.4	1648.7
27.5°	1599.7	1595.0	1582.7	1589.2	1592.5
30°	1560.2	1556.9	1543.2	1548.3	1551.7
32.5°	1519.4	1517.3	1505.0	1507.6	1512.2
35°	1456.4	1453.1	1441.1	1441.3	1447.8
37.5°	1386.6	1383.0	1373.1	1371.4	1374.0
40°	1339.0	1334.0	1325.4	1323.7	1323.7
42.5°	1290.0	1286.4	1275.0	1272.1	1276.0
45°	1214.8	1209.8	1199.5	1199.6	1202.9
47.5°	1133.4	1131.5	1119.6	1114.2	1115.4
50°	1073.6	1077.0	1065.0	1058.5	1065.0
52.5°	1021.8	1019.9	1009.3	1002.6	1005.2
55°	935.7	934.1	923.8	915.4	915.4
57.5°	849.3	845.0	834.4	828.0	833.0
60°	789.4	787.7	775.8	764.0	769.0
62.5°	729.6	726.5	714.6	706.9	710.5
65°	631.2	631.2	619.3	612.5	610.8
67.5°	545.2	537.1	530.5	522.2	520.0
70°	479.8	473.1	467.9	460.9	456.0
72.5°	415.9	411.8	404.0	397.1	396.1
75°	326.7	320.0	314.8	309.6	307.9
77.5°	232.4	231.1	226.3	223.6	224.6
80°	175.3	175.3	171.8	171.8	170.1
82.5°	123.5	124.9	124.2	121.4	121.1
85°	52.7	56.1	59.5	59.6	61.2
87.5°	9.8	17.5	17.3	18.0	18.0
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	153.0	676.0	526.0	369.4
100°	78.0	162.6	747.9	758.2	612.2
102.5°	94.3	172.2	767.0	937.7	809.0
105°	122.1	190.1	756.5	1151.7	1083.7
107.5°	150.9	211.0	712.7	1262.2	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.6	1266.0	1388.3
115°	217.1	263.5	605.5	1204.6	1372.0
117.5°	243.6	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.5
122.5°	276.1	319.2	558.4	1000.7	1181.5
125°	298.5	339.9	547.9	923.0	1088.8
127.5°	318.5	359.6	542.1	864.1	1006.4
130°	330.7	370.5	539.3	827.1	954.9
132.5°	343.0	382.7	536.7	795.6	908.8
135°	359.5	399.4	532.5	751.9	848.0
137.5°	377.5	413.7	530.5	713.2	794.1
140°	388.4	423.2	529.1	688.6	761.5
142.5°	399.3	431.4	527.8	669.2	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.3	524.1	614.8	652.7
150°	446.1	467.6	524.1	601.0	631.0
152.5°	455.5	474.5	522.7	588.8	613.3
155°	469.8	486.4	522.3	573.7	590.2
157.5°	483.7	496.6	522.3	563.4	576.0
160°	491.8	503.5	522.3	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.4
165°	508.8	515.5	524.1	546.2	547.9
167.5°	517.9	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.4	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.8	530.1	527.4
180°	527.4	527.4	527.4	527.4	527.4

(END OF REPORT)