

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: P520026

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520026
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-075D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

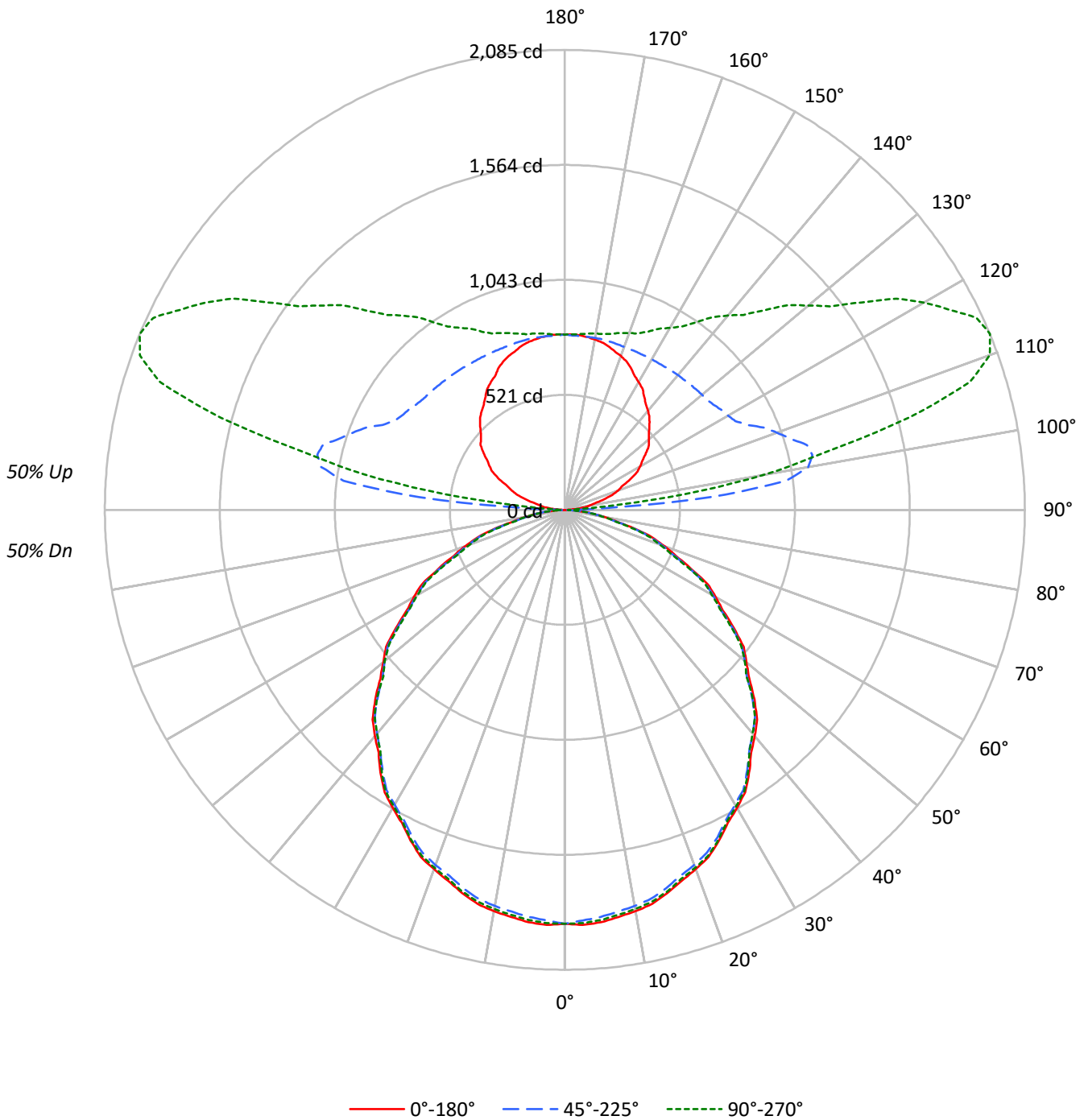
Lumens per Lamp: N/A
Luminaire Lumens: 10301.2 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 90.2
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.7
10°-20°	504.3	4.9
20°-30°	757.6	7.4
30°-40°	904.0	8.8
40°-50°	927.1	9.0
50°-60°	826.1	8.0
60°-70°	616.0	6.0
70°-80°	334.0	3.2
80°-90°	78.8	0.8
90°-100°	374.7	3.6
100°-110°	1031.0	10.0
110°-120°	1064.2	10.3
120°-130°	852.6	8.3
130°-140°	669.7	6.5
140°-150°	513.2	5.0
150°-160°	369.0	3.6
160°-170°	225.6	2.2
170°-180°	76.1	0.7
0°-30°	1439.1	14.0
0°-40°	2343.1	22.7
0°-60°	4096.3	39.8
0°-90°	5125.1	49.8
90°-120°	2469.9	24.0
90°-150°	4505.5	43.7
90°-180°	5176.0	50.2
0°-180°	10301.2	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	5
95°	56	204	663	283	181	59
105°	184	284	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	789	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

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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	11.8	15.3	15.3
92.5°	23.4	99.7	172.7	66.3	54.5
95°	55.8	204.5	662.7	283.4	180.9
97.5°	91.0	226.8	1011.3	779.2	549.8
100°	116.7	240.6	1120.8	1131.3	923.1
102.5°	140.9	257.0	1149.2	1403.5	1212.5
105°	184.3	283.5	1136.0	1730.2	1614.5
107.5°	225.6	316.1	1071.4	1890.1	1924.4
110°	255.3	337.9	1022.7	1929.9	2048.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.0
117.5°	368.2	433.7	871.3	1688.3	1965.0
120°	393.9	456.7	853.7	1593.9	1879.8
122.5°	416.9	479.7	841.6	1511.1	1782.5
125°	449.6	512.5	826.7	1398.4	1638.2
127.5°	480.7	540.6	816.8	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	516.0	577.1	807.4	1199.5	1372.7
135°	542.7	602.1	803.0	1131.0	1279.8
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.8	797.9	1038.8	1149.6
142.5°	602.8	650.2	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.3	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.4	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.3	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.5	830.6	841.2
165°	767.5	777.4	789.4	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.3	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.3	806.1
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)