

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: P520050

Luminaire Tested: **SQ4-F-075U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520050
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

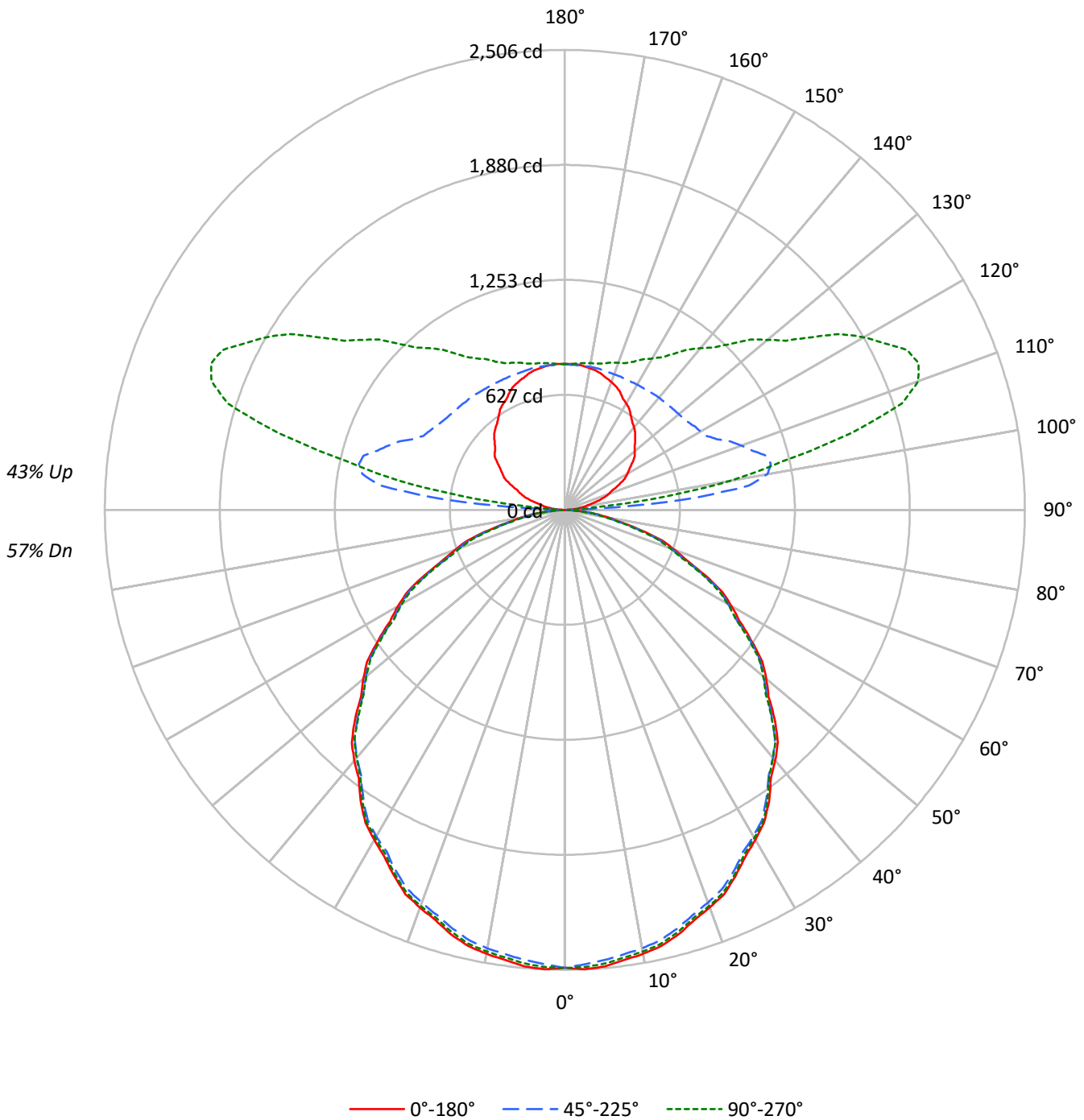
Lumens per Lamp: N/A
Luminaire Lumens: 11985.8 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 106.3
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				
RC	80					70					50					30				
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	101	101	101	101	87	87	87	74	74	74	62	62	62	57		
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48		
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40		
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34		
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29		
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25		
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22		
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19		
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17		
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15		
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11407	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11066	11152
30°	11060	10941	10996
35°	10921	10786	10844
40°	10739	10616	10626
45°	10550	10405	10372
50°	10278	10155	10131
55°	9975	9864	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8342	8180
75°	7632	7390	7236
80°	6280	6054	5781
85°	3716	4081	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.6	2.0
10°-20°	670.8	5.6
20°-30°	1007.4	8.4
30°-40°	1202.3	10.0
40°-50°	1232.3	10.3
50°-60°	1097.4	9.2
60°-70°	818.0	6.8
70°-80°	442.9	3.7
80°-90°	102.8	0.9
90°-100°	374.7	3.1
100°-110°	1031.0	8.6
110°-120°	1064.2	8.9
120°-130°	852.6	7.1
130°-140°	669.7	5.6
140°-150°	513.2	4.3
150°-160°	369.0	3.1
160°-170°	225.6	1.9
170°-180°	76.1	0.6
0°-30°	1913.8	16.0
0°-40°	3116.1	26.0
0°-60°	5445.9	45.4
0°-90°	6809.6	56.8
90°-120°	2469.9	20.6
90°-150°	4505.5	37.6
90°-180°	5176.0	43.2
0°-180°	11985.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2496	2496	2496	2496	2496	
5°	2498	2493	2463	2486	2482	237
15°	2395	2386	2362	2381	2381	675
25°	2200	2195	2174	2186	2191	1014
35°	1939	1931	1915	1919	1926	1211
45°	1617	1609	1595	1586	1590	1244
55°	1240	1242	1226	1215	1218	1110
65°	843	840	824	815	817	834
75°	428	423	415	406	406	456
85°	70	77	77	79	79	98
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°	2496.0	2496.0	2496.0	2496.0	2496.0
2.5°	2505.6	2500.2	2478.1	2495.9	2493.2
5°	2497.7	2492.7	2463.4	2485.6	2482.3
7.5°	2474.4	2469.3	2443.6	2464.1	2461.0
10°	2456.5	2451.6	2425.7	2446.2	2444.6
12.5°	2433.3	2428.2	2402.4	2423.0	2421.3
15°	2394.9	2386.5	2362.3	2381.2	2381.2
17.5°	2344.2	2337.8	2315.5	2331.2	2331.5
20°	2305.8	2300.8	2278.4	2295.5	2297.2
22.5°	2267.5	2262.4	2237.3	2253.1	2256.1
25°	2199.6	2194.6	2174.0	2186.1	2191.0
27.5°	2129.7	2122.3	2101.9	2112.6	2116.4
30°	2076.3	2072.9	2054.0	2059.2	2064.3
32.5°	2020.1	2016.7	2000.6	2003.1	2012.2
35°	1939.2	1930.8	1915.3	1918.8	1925.6
37.5°	1843.6	1839.7	1824.4	1822.5	1828.9
40°	1783.3	1776.6	1762.8	1759.5	1764.5
42.5°	1717.6	1710.9	1694.2	1690.9	1697.4
45°	1617.1	1608.8	1594.9	1586.4	1589.8
47.5°	1504.8	1504.8	1490.4	1480.6	1485.6
50°	1432.1	1432.1	1415.0	1406.6	1411.6
52.5°	1356.7	1358.1	1339.6	1335.1	1333.4
55°	1240.3	1242.0	1226.5	1214.6	1218.0
57.5°	1127.9	1124.2	1106.4	1098.4	1100.1
60°	1048.4	1043.4	1029.6	1017.8	1026.1
62.5°	967.5	965.3	951.5	938.1	937.0
65°	842.8	839.5	824.0	815.4	817.1
67.5°	718.8	714.8	700.6	688.4	692.8
70°	633.8	633.8	618.5	611.4	606.5
72.5°	555.8	549.0	537.5	527.9	524.2
75°	428.2	423.3	414.6	406.0	406.0
77.5°	311.8	307.5	301.8	296.0	294.3
80°	236.4	234.7	227.9	225.9	217.6
82.5°	166.6	166.2	162.1	157.6	157.2
85°	70.2	76.9	77.1	78.8	78.8
87.5°	12.7	21.7	21.6	19.5	19.5
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)