

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: P564784

Luminaire Tested: **SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564784
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

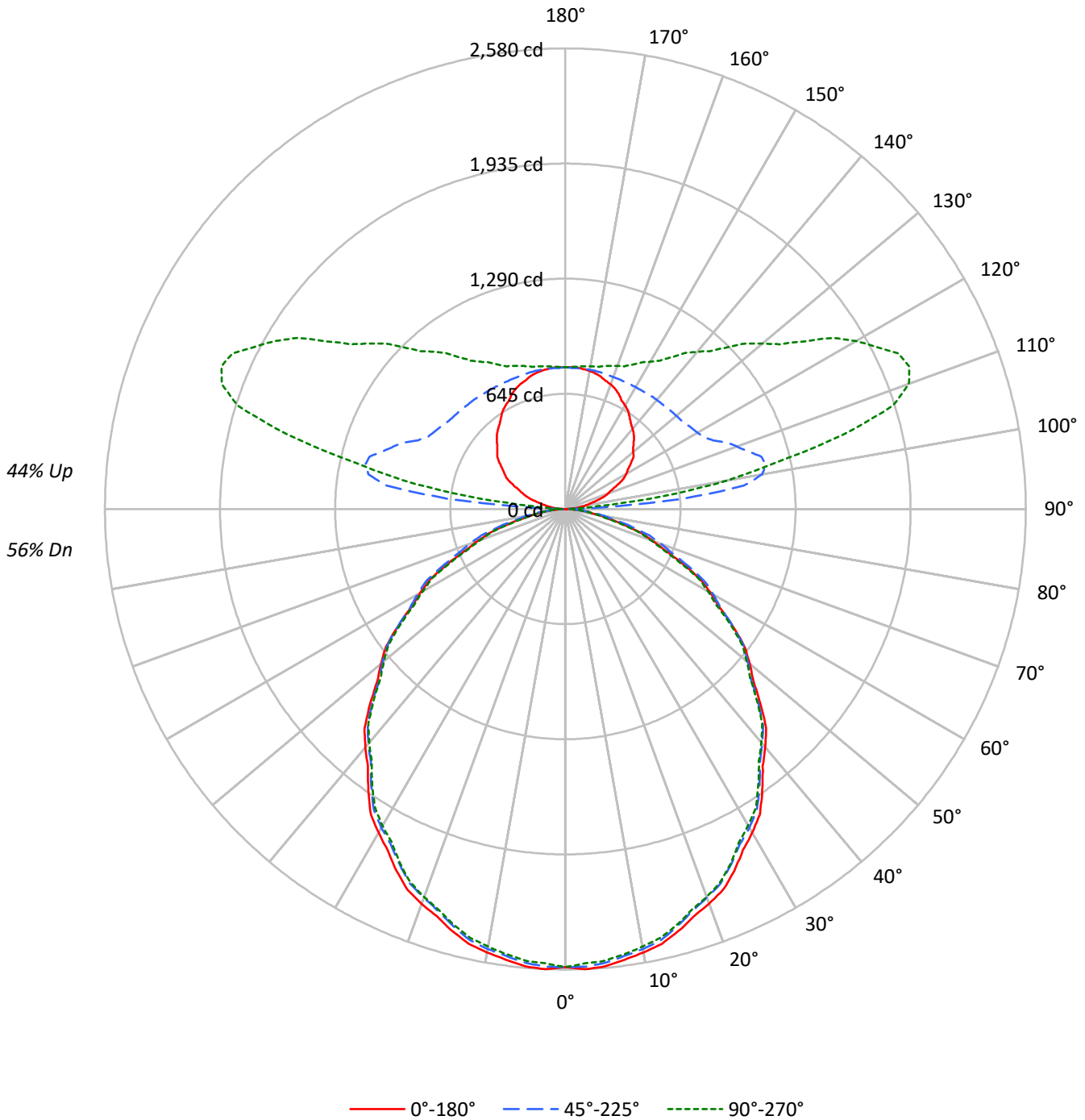
Lumens per Lamp: N/A
Luminaire Lumens: 11706.3 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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



TEST NUMBER: P564784
CATALOG NUMBER: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564784

CATALOG NUMBER: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8

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	101	101	101	101	87	87	87	73	73	73	61	61	61	56
1	99	95	91	88	92	88	85	82	76	74	71	65	63	61	55	53	52	47
2	90	83	77	72	84	77	72	67	67	63	59	57	54	51	48	46	44	40
3	83	73	66	60	76	68	62	56	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	60	53	48	52	47	43	45	41	37	38	35	32	29
5	69	58	49	43	64	54	47	41	47	41	37	40	36	32	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	37	32	28	31	28	25	22
7	59	47	39	33	55	44	37	32	38	33	28	33	29	25	29	25	22	20
8	55	43	35	29	51	40	33	28	35	29	25	30	26	23	26	23	20	18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	28	24	44	34	27	22	30	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11185	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9670	9589	9523
55°	9219	9219	9073
60°	8656	8823	8510
65°	7921	8315	7724
70°	6983	7653	6799
75°	5964	6850	5802
80°	4625	5765	4684
85°	2991	4425	3949



TEST NUMBER: P564784

CATALOG NUMBER: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.6	2.1
10°-20°	682.1	5.8
20°-30°	1011.9	8.6
30°-40°	1184.0	10.1
40°-50°	1178.7	10.1
50°-60°	1017.8	8.7
60°-70°	732.7	6.3
70°-80°	384.2	3.3
80°-90°	97.3	0.8
90°-100°	374.7	3.2
100°-110°	1031.0	8.8
110°-120°	1064.2	9.1
120°-130°	852.6	7.3
130°-140°	669.7	5.7
140°-150°	513.2	4.4
150°-160°	369.0	3.2
160°-170°	225.6	1.9
170°-180°	76.1	0.6
0°-30°	1935.6	16.5
0°-40°	3119.6	26.6
0°-60°	5316.1	45.4
0°-90°	6530.2	55.8
90°-120°	2470.0	21.1
90°-150°	4505.5	38.5
90°-180°	5176.0	44.2
0°-180°	11706.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2573	2544	2552	2545	2541	244
15°	2448	2417	2421	2416	2412	690
25°	2238	2200	2197	2184	2191	1029
35°	1924	1897	1897	1879	1885	1203
45°	1546	1533	1526	1521	1519	1193
55°	1146	1144	1146	1130	1128	1023
65°	726	748	762	732	708	719
75°	335	366	384	359	326	359
85°	56	74	84	79	75	75
90°	2	7	12	15	15	6
95°	56	205	663	283	181	59
105°	184	283	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	790	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

TEST NUMBER: P564784

CATALOG NUMBER: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2565.9	2565.9	2565.9	2565.9	2565.9
2.5°	2580.3	2559.1	2565.9	2560.1	2547.8
5°	2572.6	2543.9	2552.3	2545.4	2541.0
7.5°	2546.4	2519.9	2526.1	2518.8	2516.1
10°	2522.9	2496.4	2502.6	2493.4	2489.0
12.5°	2495.8	2467.5	2473.6	2464.5	2461.9
15°	2448.3	2417.4	2421.2	2416.5	2412.1
17.5°	2393.1	2361.8	2362.4	2355.1	2354.3
20°	2353.4	2320.2	2317.2	2308.2	2312.7
22.5°	2309.9	2275.0	2272.0	2259.4	2265.6
25°	2238.1	2200.5	2197.4	2184.0	2190.6
27.5°	2154.9	2117.7	2117.8	2099.0	2106.0
30°	2093.4	2058.0	2061.7	2039.3	2048.2
32.5°	2028.3	1996.4	1998.4	1976.0	1984.9
35°	1923.8	1897.3	1896.7	1878.8	1885.4
37.5°	1817.1	1793.7	1790.0	1779.6	1781.4
40°	1743.0	1723.1	1715.8	1709.1	1709.1
42.5°	1665.2	1647.1	1639.9	1634.9	1633.1
45°	1546.3	1533.0	1525.9	1521.4	1519.2
47.5°	1428.7	1416.4	1410.2	1407.0	1404.8
50°	1347.4	1338.5	1336.1	1329.2	1327.0
52.5°	1266.0	1260.7	1258.3	1249.6	1247.4
55°	1146.2	1143.9	1146.2	1130.3	1128.1
57.5°	1021.4	1024.9	1032.2	1010.8	1005.5
60°	938.2	947.0	956.3	931.2	922.4
62.5°	853.2	867.3	880.3	851.5	839.2
65°	725.7	747.8	761.8	731.9	707.6
67.5°	602.7	630.1	647.0	614.7	587.3
70°	517.7	548.6	567.4	535.1	504.1
72.5°	443.5	478.0	493.3	462.7	431.8
75°	334.6	365.5	384.3	358.7	325.5
77.5°	237.4	266.5	282.1	259.8	232.4
80°	174.1	205.0	217.0	198.4	176.3
82.5°	123.4	149.1	157.3	146.1	131.1
85°	56.5	74.2	83.6	79.0	74.6
87.5°	14.8	28.2	36.7	37.4	39.2
90°	1.7	6.6	11.8	15.2	15.2
92.5°	23.3	99.7	172.8	66.3	54.4
95°	55.8	204.6	662.7	283.4	180.9
97.5°	90.9	226.8	1011.3	779.2	549.8
100°	116.6	240.6	1120.8	1131.3	923.0
102.5°	141.0	257.0	1149.2	1403.5	1212.4
105°	184.3	283.4	1136.0	1730.2	1614.4
107.5°	225.5	316.1	1071.5	1890.1	1924.5
110°	255.3	337.9	1022.8	1929.9	2048.9

TEST NUMBER: P564784

CATALOG NUMBER: SQ4-PW1-075U-100D-940-1D-UNV-STD-W-8

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	2059.1
117.5°	368.2	433.7	871.3	1688.4	1965.1
120°	393.9	456.7	853.7	1593.9	1879.9
122.5°	416.9	479.7	841.5	1511.1	1782.5
125°	449.7	512.5	826.7	1398.4	1638.1
127.5°	480.8	540.6	816.9	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	515.9	577.1	807.4	1199.5	1372.7
135°	542.7	602.2	803.0	1131.0	1279.7
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.9	797.9	1038.8	1149.6
142.5°	602.8	650.1	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.2	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.5	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	848.4	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.4	830.6	841.2
165°	767.5	777.4	789.5	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.4	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.4	806.0
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)