

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: P564709

Luminaire Tested: **SQ4-PW1-050U-125D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564709
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17665.3 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

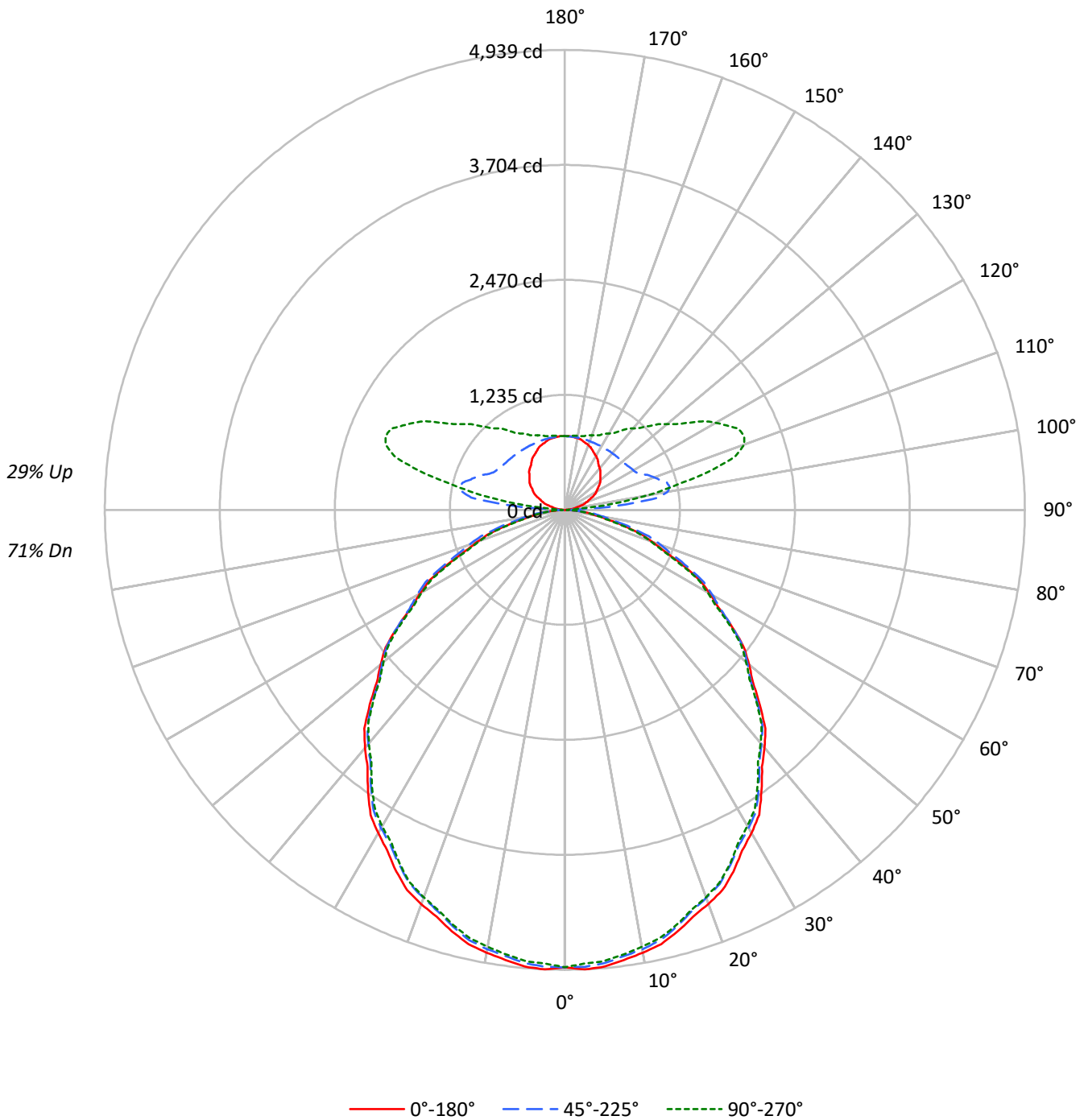
Input Watts (W): 167
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	103	98	94	91	97	93	90	86	84	81	78	75	73	71	67	65	64	60
2	94	86	80	74	88	82	76	71	73	69	65	66	62	59	59	56	54	50
3	85	76	68	62	81	72	65	60	65	59	55	58	54	50	52	49	46	43
4	78	67	59	53	74	64	56	51	58	52	47	52	47	43	47	43	40	37
5	72	60	52	45	68	57	49	44	52	45	41	47	42	38	42	38	35	32
6	66	54	46	40	63	51	44	38	47	40	36	42	37	33	38	34	31	28
7	61	49	41	35	58	47	39	34	42	36	32	39	33	29	35	31	27	25
8	57	44	36	31	54	43	35	30	39	33	28	35	30	26	32	28	24	22
9	53	41	33	28	50	39	32	27	36	30	25	33	27	24	30	25	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15105	15105	15105
5°	15203	15083	15016
10°	15081	14960	14878
15°	14921	14756	14701
20°	14743	14516	14488
25°	14537	14273	14229
30°	14230	14015	13923
35°	13826	13631	13550
40°	13394	13186	13134
45°	12873	12704	12648
50°	12340	12236	12154
55°	11764	11764	11578
60°	11046	11259	10860
65°	10109	10612	9857
70°	8911	9767	8677
75°	7610	8742	7404
80°	5901	7357	5977
85°	3818	5649	5039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	2.6
10°-20°	1305.8	7.4
20°-30°	1936.9	11.0
30°-40°	2266.3	12.8
40°-50°	2256.2	12.8
50°-60°	1948.4	11.0
60°-70°	1402.5	7.9
70°-80°	735.4	4.2
80°-90°	185.4	1.0
90°-100°	379.8	2.2
100°-110°	1031.8	5.8
110°-120°	1060.8	6.0
120°-130°	848.2	4.8
130°-140°	666.4	3.8
140°-150°	511.0	2.9
150°-160°	367.5	2.1
160°-170°	224.7	1.3
170°-180°	75.7	0.4
0°-30°	3705.1	21.0
0°-40°	5971.5	33.8
0°-60°	10176.1	57.6
0°-90°	12499.4	70.8
90°-120°	2472.4	14.0
90°-150°	4498.0	25.5
90°-180°	5166.0	29.2
0°-180°	17665.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4912	4912	4912	4912	4912	
5°	4924	4870	4886	4872	4864	466
15°	4686	4627	4635	4626	4617	1321
25°	4284	4212	4206	4180	4193	1970
35°	3683	3632	3631	3596	3609	2302
45°	2960	2934	2921	2912	2908	2284
55°	2194	2190	2194	2164	2159	1958
65°	1389	1431	1458	1401	1354	1377
75°	640	700	736	687	623	686
85°	108	142	160	151	143	143
90°	2	10	18	23	23	8
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4911.6	4911.6	4911.6	4911.6	4911.6
2.5°	4939.3	4898.6	4911.6	4900.6	4876.9
5°	4924.5	4869.5	4885.6	4872.4	4864.0
7.5°	4874.3	4823.6	4835.4	4821.4	4816.4
10°	4829.3	4778.6	4790.4	4772.9	4764.4
12.5°	4777.4	4723.3	4735.0	4717.6	4712.5
15°	4686.5	4627.3	4634.6	4625.8	4617.3
17.5°	4580.9	4520.9	4522.1	4508.2	4506.5
20°	4504.8	4441.3	4435.5	4418.4	4426.9
22.5°	4421.7	4354.8	4349.0	4325.0	4336.9
25°	4284.1	4212.2	4206.2	4180.5	4193.2
27.5°	4124.8	4053.8	4053.9	4017.8	4031.4
30°	4007.1	3939.4	3946.6	3903.7	3920.6
32.5°	3882.5	3821.6	3825.4	3782.5	3799.4
35°	3682.6	3631.8	3630.7	3596.3	3609.0
37.5°	3478.3	3433.5	3426.4	3406.6	3410.0
40°	3336.4	3298.3	3284.5	3271.5	3271.5
42.5°	3187.5	3152.8	3139.1	3129.5	3126.1
45°	2959.9	2934.5	2921.0	2912.2	2908.0
47.5°	2734.9	2711.2	2699.4	2693.3	2689.0
50°	2579.1	2562.2	2557.5	2544.4	2540.2
52.5°	2423.3	2413.2	2408.6	2392.1	2387.8
55°	2194.0	2189.7	2194.0	2163.6	2159.4
57.5°	1955.1	1961.9	1975.9	1935.0	1924.8
60°	1795.9	1812.8	1830.5	1782.5	1765.6
62.5°	1633.1	1660.2	1685.1	1630.0	1606.3
65°	1389.1	1431.4	1458.3	1401.0	1354.5
67.5°	1153.7	1206.1	1238.5	1176.7	1124.2
70°	991.0	1050.2	1086.2	1024.2	965.0
72.5°	849.0	915.0	944.2	885.8	826.5
75°	640.4	699.7	735.7	686.6	623.1
77.5°	454.4	510.2	540.1	497.3	444.9
80°	333.2	392.4	415.4	379.8	337.5
82.5°	236.3	285.4	301.2	279.8	251.0
85°	108.2	142.0	160.1	151.3	142.8
87.5°	28.2	53.4	69.3	70.4	73.8
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)