

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: P563989

Luminaire Tested: **SQ4-PR1-050U-075D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563989
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 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: 12576.1 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

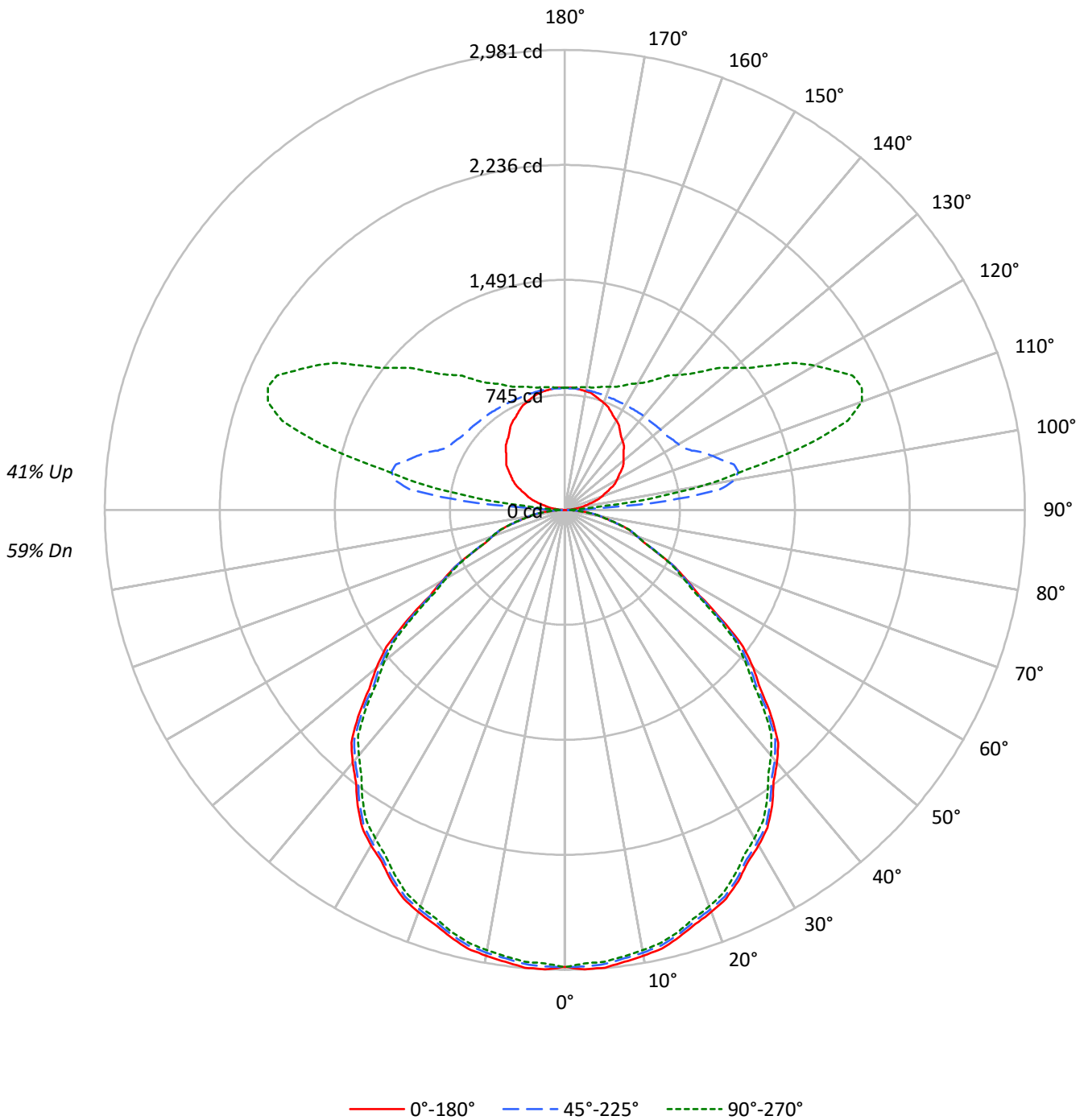
Input Watts (W): 105.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9112	9112	9112
5°	9194	9123	9076
10°	9165	9102	9054
15°	9125	9068	9019
20°	9079	9021	8954
25°	9015	8955	8850
30°	8918	8854	8728
35°	8786	8710	8585
40°	8586	8494	8340
45°	8236	8092	7925
50°	7619	7436	7290
55°	6650	6500	6363
60°	5604	5557	5447
65°	4847	4866	4828
70°	4452	4475	4475
75°	4275	4275	4306
80°	4022	4068	4022
85°	3243	3603	3603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.2	2.2
10°-20°	801.7	6.4
20°-30°	1209.2	9.6
30°-40°	1440.7	11.5
40°-50°	1420.4	11.3
50°-60°	1085.6	8.6
60°-70°	671.8	5.3
70°-80°	381.5	3.0
80°-90°	119.1	0.9
90°-100°	379.8	3.0
100°-110°	1031.8	8.2
110°-120°	1060.8	8.4
120°-130°	848.2	6.7
130°-140°	666.4	5.3
140°-150°	511.0	4.1
150°-160°	367.5	2.9
160°-170°	224.7	1.8
170°-180°	75.7	0.6
0°-30°	2291.0	18.2
0°-40°	3731.7	29.7
0°-60°	6237.7	49.6
0°-90°	7410.2	58.9
90°-120°	2472.4	19.7
90°-150°	4498.0	35.8
90°-180°	5166.0	41.1
0°-180°	12576.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2963	2963	2963	2963	2963	
5°	2978	2946	2955	2945	2940	283
15°	2866	2836	2848	2838	2833	809
25°	2657	2624	2639	2611	2608	1223
35°	2340	2313	2320	2289	2287	1461
45°	1894	1869	1860	1827	1822	1451
55°	1240	1220	1212	1192	1187	1111
65°	666	661	669	664	664	675
75°	360	360	360	362	362	380
85°	92	97	102	102	102	107
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°	2963.0	2963.0	2963.0	2963.0	2963.0
2.5°	2981.4	2955.4	2963.0	2956.5	2942.6
5°	2978.3	2945.9	2955.3	2945.0	2940.0
7.5°	2955.3	2923.4	2932.9	2922.6	2919.6
10°	2934.9	2905.0	2914.5	2904.2	2899.2
12.5°	2912.5	2880.5	2892.0	2879.7	2874.7
15°	2866.0	2836.1	2848.1	2837.8	2832.8
17.5°	2815.0	2783.0	2795.1	2783.2	2776.7
20°	2774.1	2744.2	2756.3	2738.3	2735.9
22.5°	2729.2	2699.3	2711.4	2687.4	2686.9
25°	2656.7	2624.3	2638.9	2610.7	2608.2
27.5°	2570.5	2540.5	2552.6	2524.0	2521.0
30°	2511.3	2481.3	2493.4	2462.7	2457.7
32.5°	2443.9	2415.9	2426.0	2395.3	2392.3
35°	2340.3	2312.8	2319.9	2289.2	2286.7
37.5°	2222.4	2197.4	2201.4	2167.7	2165.2
40°	2138.7	2113.7	2115.7	2079.9	2077.4
42.5°	2046.8	2021.8	2019.7	1983.9	1981.5
45°	1893.7	1868.7	1860.5	1827.2	1822.2
47.5°	1719.1	1694.1	1678.8	1651.6	1648.1
50°	1592.5	1567.6	1554.2	1531.1	1523.6
52.5°	1455.7	1430.8	1419.5	1398.4	1390.9
55°	1240.3	1220.4	1212.2	1191.7	1186.7
57.5°	1035.6	1022.2	1019.8	999.9	997.9
60°	911.1	903.6	903.4	885.6	885.6
62.5°	804.9	799.4	803.4	791.6	789.6
65°	666.1	661.1	668.7	663.5	663.5
67.5°	556.4	556.4	561.0	558.9	558.9
70°	495.1	495.1	497.7	497.7	497.7
72.5°	440.0	438.0	444.6	444.5	442.5
75°	359.8	359.8	359.8	362.4	362.4
77.5°	280.2	280.7	282.8	282.2	280.2
80°	227.1	229.6	229.7	227.1	227.1
82.5°	174.1	176.5	176.6	176.0	174.1
85°	91.9	96.9	102.1	102.1	102.1
87.5°	27.1	36.5	44.4	45.4	43.4
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)