

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: P564013

Luminaire Tested: **SQ4-PR1-050U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564013
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-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 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: 15010.8 lumens
Efficiency: N/A
Efficacy: 111.7 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: Semi-Direct

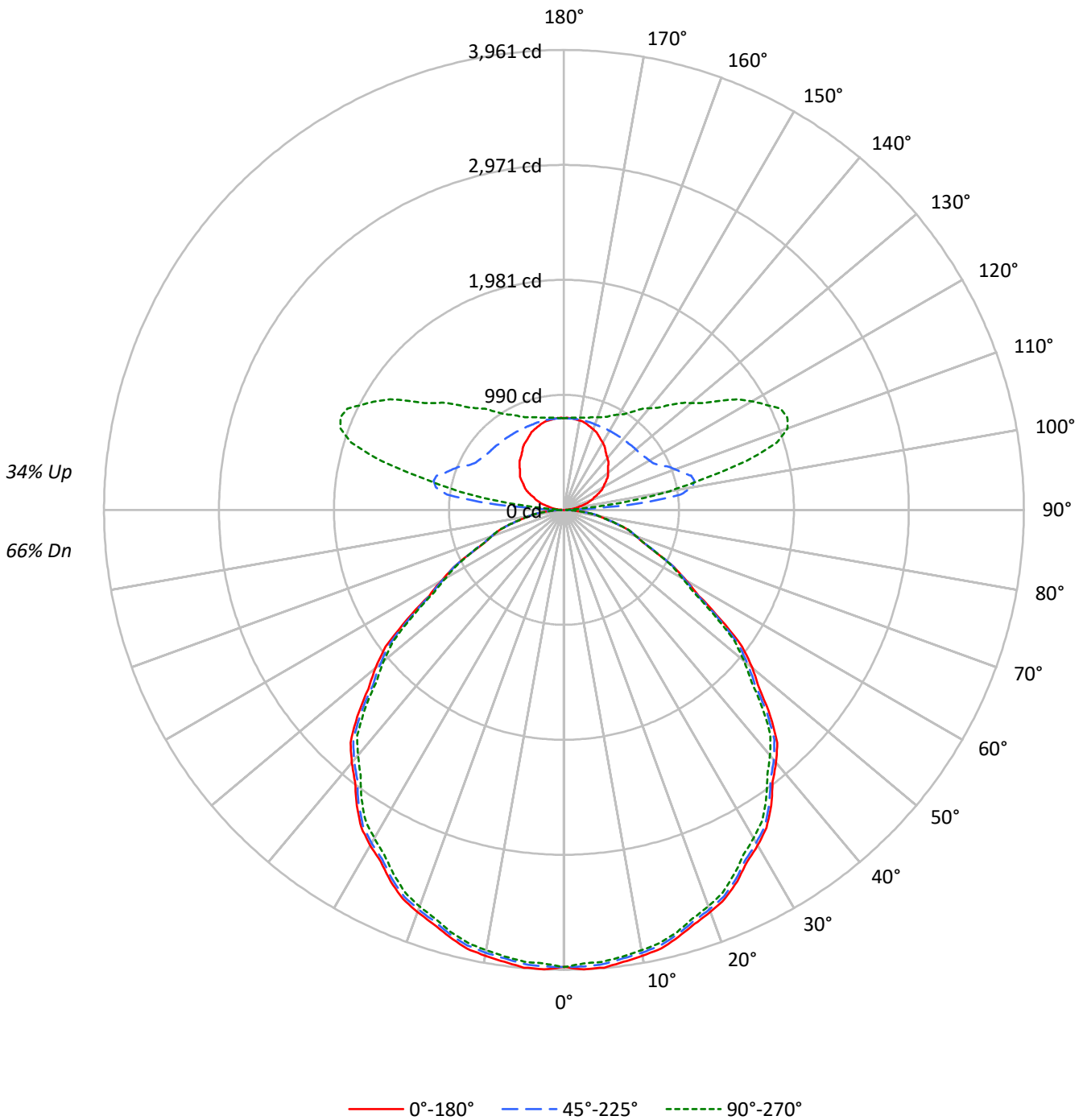
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12108	12108	12108
5°	12217	12123	12060
10°	12178	12093	12030
15°	12125	12049	11984
20°	12063	11986	11897
25°	11978	11898	11760
30°	11849	11765	11596
35°	11674	11572	11407
40°	11408	11286	11082
45°	10943	10751	10530
50°	10124	9880	9686
55°	8836	8636	8454
60°	7446	7383	7238
65°	6440	6465	6416
70°	5916	5945	5945
75°	5681	5681	5721
80°	5345	5405	5345
85°	4308	4785	4785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.3	2.5
10°-20°	1065.2	7.1
20°-30°	1606.6	10.7
30°-40°	1914.3	12.8
40°-50°	1887.3	12.6
50°-60°	1442.4	9.6
60°-70°	892.6	5.9
70°-80°	507.0	3.4
80°-90°	157.3	1.0
90°-100°	379.8	2.5
100°-110°	1031.8	6.9
110°-120°	1060.8	7.1
120°-130°	848.2	5.7
130°-140°	666.4	4.4
140°-150°	511.0	3.4
150°-160°	367.5	2.4
160°-170°	224.7	1.5
170°-180°	75.7	0.5
0°-30°	3044.1	20.3
0°-40°	4958.4	33.0
0°-60°	8288.1	55.2
0°-90°	9844.9	65.6
90°-120°	2472.4	16.5
90°-150°	4498.0	30.0
90°-180°	5166.0	34.4
0°-180°	15010.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3937	3937	3937	3937	3937	
5°	3957	3914	3927	3913	3906	375
15°	3808	3768	3784	3771	3764	1075
25°	3530	3487	3506	3469	3466	1625
35°	3110	3073	3082	3042	3038	1941
45°	2516	2483	2472	2428	2421	1928
55°	1648	1622	1611	1583	1577	1477
65°	885	878	888	882	882	897
75°	478	478	478	482	482	505
85°	122	129	136	136	136	142
90°	2	10	18	23	23	9
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°	3936.9	3936.9	3936.9	3936.9	3936.9
2.5°	3961.3	3926.9	3936.9	3928.4	3909.8
5°	3957.3	3914.2	3926.8	3913.0	3906.4
7.5°	3926.8	3884.3	3896.9	3883.3	3879.3
10°	3899.6	3859.8	3872.5	3858.8	3852.2
12.5°	3869.8	3827.4	3842.7	3826.2	3819.6
15°	3808.1	3768.3	3784.3	3770.6	3764.0
17.5°	3740.3	3697.8	3713.8	3698.0	3689.4
20°	3686.0	3646.2	3662.3	3638.5	3635.1
22.5°	3626.3	3586.5	3602.6	3570.7	3570.0
25°	3530.0	3486.9	3506.3	3468.9	3465.6
27.5°	3415.4	3375.6	3391.7	3353.6	3349.6
30°	3336.7	3296.9	3313.0	3272.2	3265.5
32.5°	3247.2	3210.1	3223.5	3182.7	3178.7
35°	3109.5	3073.1	3082.4	3041.6	3038.3
37.5°	2952.9	2919.7	2925.1	2880.2	2876.9
40°	2841.6	2808.5	2811.1	2763.6	2760.3
42.5°	2719.6	2686.4	2683.6	2636.1	2632.8
45°	2516.1	2483.0	2472.0	2427.8	2421.2
47.5°	2284.2	2251.0	2230.6	2194.5	2189.9
50°	2116.0	2082.8	2065.1	2034.4	2024.4
52.5°	1934.2	1901.1	1886.1	1858.0	1848.1
55°	1648.0	1621.5	1610.7	1583.4	1576.8
57.5°	1376.1	1358.2	1355.0	1328.5	1325.9
60°	1210.6	1200.6	1200.4	1176.7	1176.7
62.5°	1069.5	1062.2	1067.5	1051.8	1049.2
65°	885.0	878.4	888.4	881.7	881.7
67.5°	739.2	739.2	745.3	742.6	742.6
70°	657.9	657.9	661.2	661.2	661.2
72.5°	584.6	582.0	590.7	590.6	588.0
75°	478.1	478.1	478.1	481.5	481.5
77.5°	372.3	373.0	375.7	375.0	372.3
80°	301.8	305.1	305.2	301.8	301.8
82.5°	231.3	234.6	234.7	233.9	231.3
85°	122.1	128.7	135.6	135.6	135.6
87.5°	35.8	47.9	57.8	58.8	56.1
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)