

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: P564037

Luminaire Tested: **SQ4-PR1-050U-125D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564037
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-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE 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: 17728.5 lumens
Efficiency: N/A
Efficacy: 106.2 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

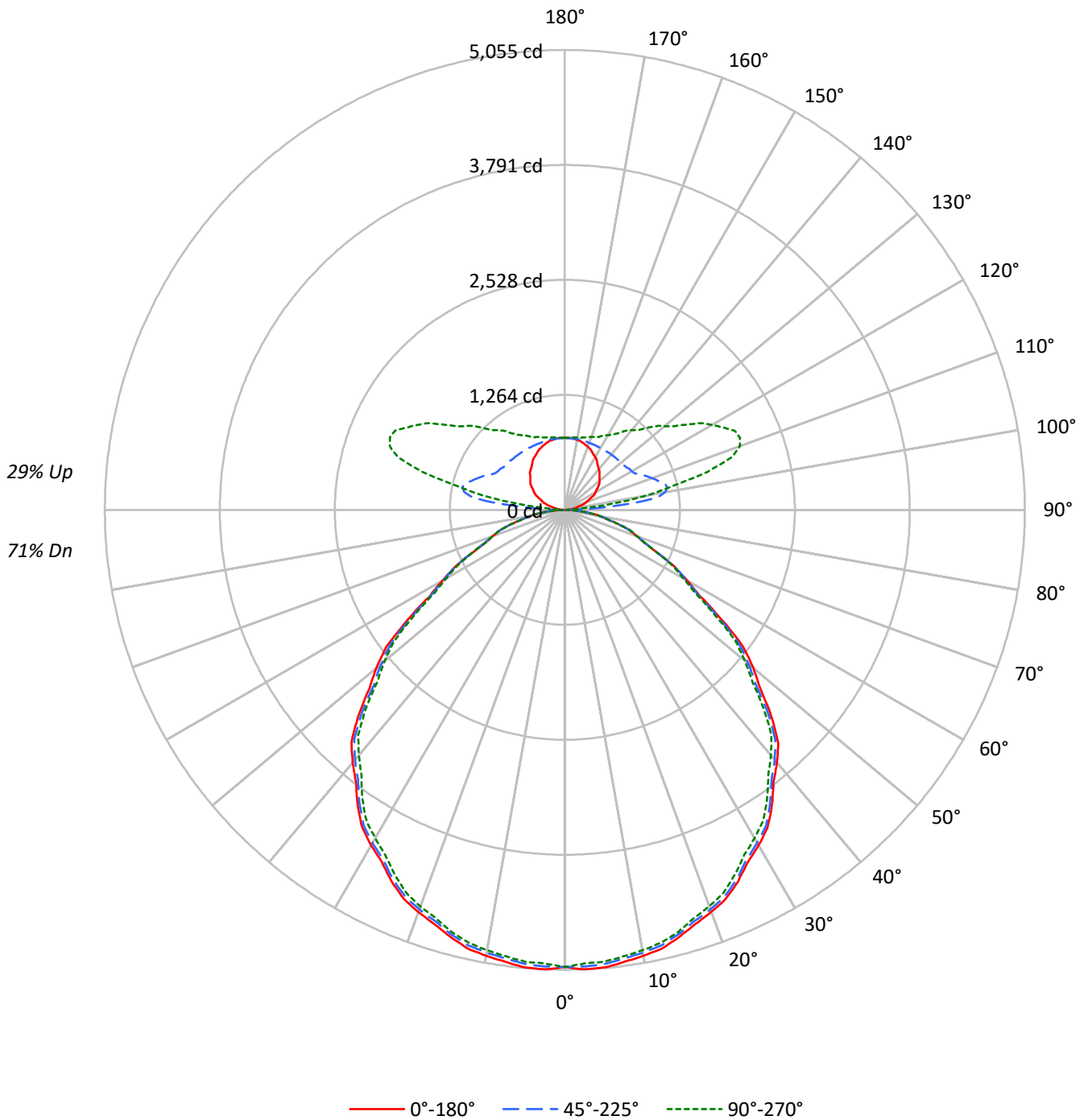
Input Watts (W): 167
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	75	75	75	71	
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	66	64	64	64	64	60	
2	94	87	80	75	89	82	77	72	74	70	66	67	63	60	60	57	55	55	55	55	51	
3	86	77	69	63	81	73	66	61	66	60	56	59	55	52	53	50	47	47	47	47	44	
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	41	38	
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	36	33	
6	67	55	47	41	63	52	45	39	48	41	37	43	38	34	39	35	32	32	32	32	29	
7	62	50	42	36	59	48	40	35	43	37	33	40	34	30	36	32	28	28	28	28	26	
8	58	45	37	32	55	43	36	31	40	34	29	36	31	27	33	29	25	25	25	25	23	
9	54	41	34	29	51	40	33	28	37	30	26	33	28	25	31	26	23	23	23	23	21	
10	51	38	31	26	48	37	30	25	34	28	24	31	26	22	28	24	21	21	21	21	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15451	15451	15451
5°	15590	15470	15390
10°	15541	15432	15352
15°	15472	15376	15293
20°	15394	15295	15182
25°	15286	15183	15007
30°	15121	15014	14798
35°	14898	14768	14557
40°	14558	14402	14142
45°	13965	13720	13438
50°	12920	12609	12360
55°	11276	11021	10789
60°	9502	9422	9236
65°	8219	8251	8187
70°	7549	7587	7587
75°	7251	7251	7302
80°	6820	6898	6820
85°	5498	6108	6108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.1	2.7
10°-20°	1359.3	7.7
20°-30°	2050.3	11.6
30°-40°	2442.9	13.8
40°-50°	2408.5	13.6
50°-60°	1840.7	10.4
60°-70°	1139.1	6.4
70°-80°	647.0	3.6
80°-90°	199.8	1.1
90°-100°	379.8	2.1
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°	3884.7	21.9
0°-40°	6327.6	35.7
0°-60°	10576.7	59.7
0°-90°	12562.6	70.9
90°-120°	2472.4	13.9
90°-150°	4498.0	25.4
90°-180°	5166.0	29.1
0°-180°	17728.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5024	5024	5024	5024	5024	
5°	5050	4995	5011	4994	4985	479
15°	4860	4809	4829	4812	4803	1371
25°	4505	4450	4474	4427	4423	2073
35°	3968	3922	3934	3882	3877	2477
45°	3211	3169	3155	3098	3090	2460
55°	2103	2069	2056	2021	2012	1884
65°	1129	1121	1134	1125	1125	1144
75°	610	610	610	614	614	644
85°	156	164	173	173	173	181
90°	2	10	18	23	23	10
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°	5024.1	5024.1	5024.1	5024.1	5024.1
2.5°	5055.2	5011.2	5024.1	5013.1	4989.4
5°	5050.0	4995.0	5011.1	4993.6	4985.1
7.5°	5011.1	4956.9	4973.0	4955.6	4950.5
10°	4976.5	4925.7	4941.8	4924.3	4915.9
12.5°	4938.4	4884.2	4903.8	4882.8	4874.3
15°	4859.6	4808.8	4829.3	4811.8	4803.4
17.5°	4773.1	4718.9	4739.3	4719.2	4708.2
20°	4703.8	4653.1	4673.5	4643.2	4638.9
22.5°	4627.7	4576.9	4597.4	4556.7	4555.8
25°	4504.8	4449.8	4474.5	4426.8	4422.6
27.5°	4358.5	4307.7	4328.2	4279.6	4274.6
30°	4258.1	4207.3	4227.8	4175.7	4167.2
32.5°	4143.9	4096.5	4113.6	4061.5	4056.5
35°	3968.2	3921.6	3933.6	3881.5	3877.3
37.5°	3768.3	3725.9	3732.8	3675.6	3671.3
40°	3626.3	3584.0	3587.4	3526.7	3522.5
42.5°	3470.5	3428.2	3424.7	3364.0	3359.8
45°	3210.9	3168.6	3154.6	3098.2	3089.7
47.5°	2914.9	2872.6	2846.5	2800.5	2794.6
50°	2700.3	2658.0	2635.4	2596.1	2583.4
52.5°	2468.3	2426.0	2406.9	2371.1	2358.4
55°	2103.1	2069.2	2055.5	2020.7	2012.2
57.5°	1756.0	1733.2	1729.2	1695.4	1692.0
60°	1544.9	1532.2	1531.9	1501.6	1501.6
62.5°	1364.8	1355.5	1362.3	1342.3	1338.9
65°	1129.4	1121.0	1133.8	1125.1	1125.1
67.5°	943.4	943.4	951.2	947.7	947.7
70°	839.5	839.5	843.8	843.8	843.8
72.5°	746.0	742.7	753.8	753.7	750.4
75°	610.2	610.2	610.2	614.5	614.5
77.5°	475.1	476.0	479.5	478.5	475.1
80°	385.1	389.4	389.5	385.1	385.1
82.5°	295.1	299.4	299.5	298.5	295.1
85°	155.8	164.2	173.1	173.1	173.1
87.5°	45.5	60.5	72.8	73.7	70.4
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)