

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: P519971

Luminaire Tested: **SQ4-F-050U-125D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519971
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

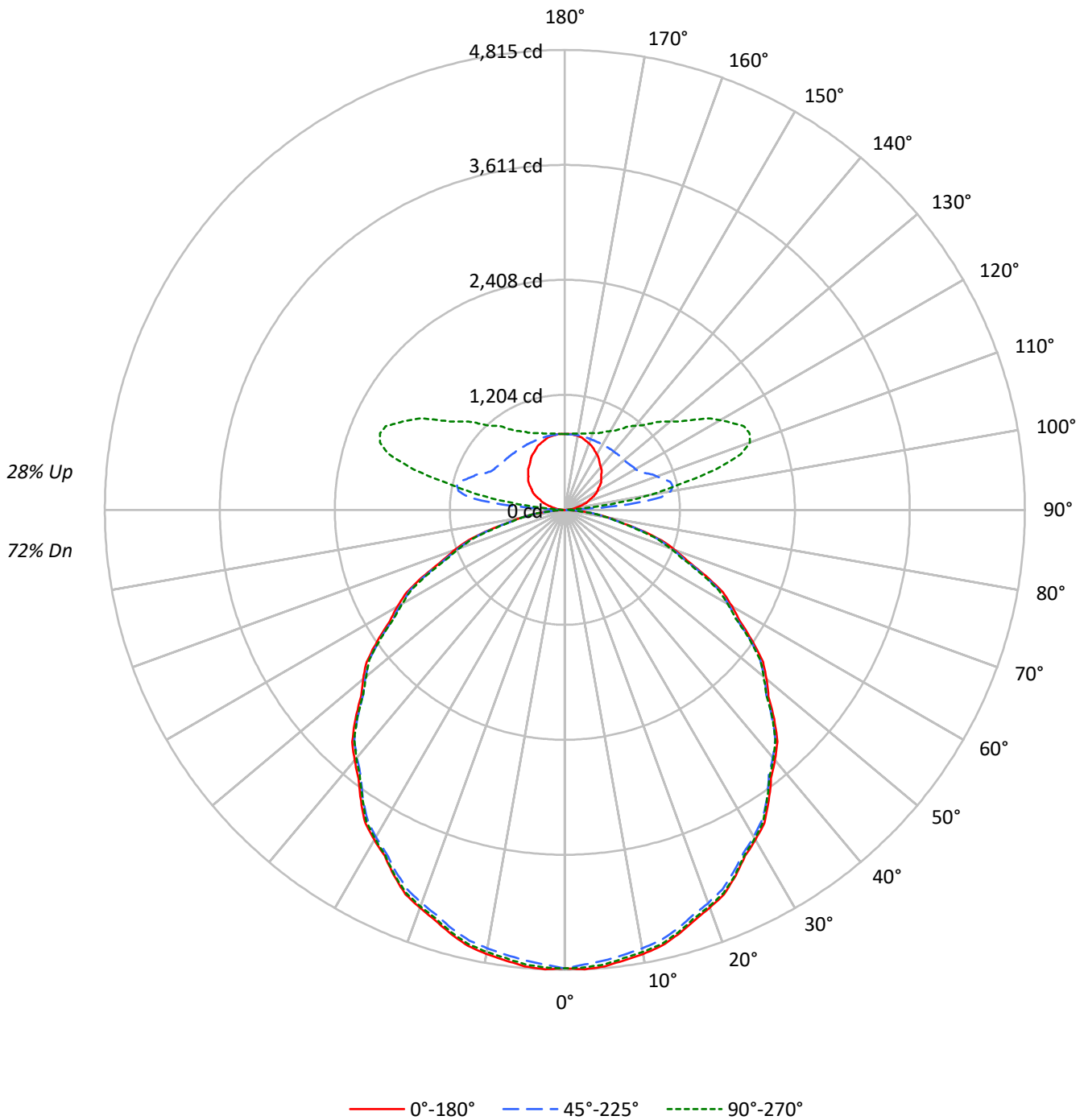
Lumens per Lamp: N/A
Luminaire Lumens: 18292.1 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 173.9
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	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14763	14763	14763
5°	14811	14624	14746
10°	14743	14562	14677
15°	14644	14468	14586
20°	14509	14345	14457
25°	14344	14192	14308
30°	14167	14045	14119
35°	13966	13846	13856
40°	13735	13587	13629
45°	13478	13329	13352
50°	13184	13032	12994
55°	12848	12664	12636
60°	12431	12155	12090
65°	11785	11535	11382
70°	10975	10690	10547
75°	9764	9543	9261
80°	7954	7720	7674
85°	4753	5406	5406



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	452.9	2.5
10°-20°	1290.0	7.1
20°-30°	1938.0	10.6
30°-40°	2312.4	12.6
40°-50°	2370.3	13.0
50°-60°	2112.7	11.5
60°-70°	1572.7	8.6
70°-80°	852.1	4.7
80°-90°	198.7	1.1
90°-100°	381.8	2.1
100°-110°	1037.0	5.7
110°-120°	1066.3	5.8
120°-130°	852.5	4.7
130°-140°	669.8	3.7
140°-150°	513.6	2.8
150°-160°	369.4	2.0
160°-170°	225.9	1.2
170°-180°	76.1	0.4
0°-30°	3680.9	20.1
0°-40°	5993.3	32.8
0°-60°	10476.4	57.3
0°-90°	13099.9	71.6
90°-120°	2485.0	13.6
90°-150°	4521.0	24.7
90°-180°	5192.0	28.4
0°-180°	18292.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4800	4800	4800	4800	4800	
5°	4798	4790	4737	4779	4777	455
15°	4600	4589	4544	4584	4581	1297
25°	4227	4219	4182	4206	4216	1947
35°	3720	3717	3688	3688	3691	2326
45°	3099	3091	3065	3060	3070	2388
55°	2396	2388	2362	2344	2357	2140
65°	1620	1609	1585	1574	1564	1604
75°	822	822	803	787	779	873
85°	135	153	153	156	153	186
90°	3	10	18	23	23	7
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4800.3	4800.3	4800.3	4800.3	4800.3
2.5°	4815.1	4806.9	4764.4	4800.2	4794.0
5°	4797.7	4790.0	4737.0	4779.1	4776.6
7.5°	4757.0	4747.2	4698.9	4738.4	4733.7
10°	4721.1	4713.4	4663.0	4702.5	4700.0
12.5°	4676.7	4669.0	4618.6	4658.2	4657.7
15°	4599.5	4589.2	4544.1	4583.6	4581.1
17.5°	4507.1	4495.3	4450.6	4481.9	4487.0
20°	4433.1	4425.4	4383.0	4412.1	4417.3
22.5°	4357.0	4347.2	4302.6	4336.0	4341.2
25°	4227.1	4219.3	4182.2	4206.2	4216.5
27.5°	4084.4	4084.4	4050.0	4067.1	4073.3
30°	3989.3	3989.3	3954.9	3965.8	3976.0
32.5°	3887.9	3879.5	3847.1	3855.8	3866.2
35°	3719.8	3717.3	3688.1	3688.2	3690.7
37.5°	3546.0	3538.7	3506.9	3509.3	3521.7
40°	3421.2	3416.1	3384.3	3384.5	3394.9
42.5°	3294.4	3289.3	3261.7	3257.5	3261.7
45°	3098.9	3091.2	3064.6	3059.6	3069.9
47.5°	2890.8	2892.9	2861.2	2854.0	2859.6
50°	2755.6	2755.6	2723.8	2708.1	2715.9
52.5°	2613.9	2609.8	2578.0	2560.4	2578.5
55°	2396.3	2388.5	2361.9	2343.7	2356.6
57.5°	2173.3	2161.3	2134.7	2114.7	2122.0
60°	2021.1	2003.0	1976.2	1960.4	1965.6
62.5°	1862.5	1852.7	1823.9	1799.9	1811.3
65°	1619.5	1609.2	1585.1	1574.3	1564.1
67.5°	1381.2	1374.4	1347.4	1336.1	1329.4
70°	1220.6	1207.6	1188.9	1175.6	1173.0
72.5°	1064.2	1049.2	1030.3	1019.1	1012.4
75°	821.7	821.7	803.1	787.1	779.4
77.5°	590.8	592.8	577.5	572.1	568.6
80°	449.1	449.1	435.9	430.6	433.3
82.5°	313.9	320.1	315.4	308.0	304.4
85°	134.7	152.8	153.2	155.8	153.2
87.5°	23.8	39.8	43.9	40.5	36.5
90°	2.6	10.0	17.9	23.1	23.1
92.5°	23.1	104.5	181.5	78.0	65.9
95°	56.2	208.7	664.8	289.4	194.3
97.5°	93.1	230.6	1019.3	793.0	556.9
100°	117.7	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.6	1156.2	1413.7	1219.7
105°	184.1	286.6	1140.5	1736.5	1633.9
107.5°	227.6	318.0	1074.4	1903.1	1931.6
110°	258.3	340.8	1025.3	1935.9	2058.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.8	1879.4
122.5°	416.3	481.3	841.7	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.3	817.2	1302.9	1517.4
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.1	1199.5	1370.1
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.1	623.7	799.8	1075.2	1197.2
140°	585.5	638.0	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.1	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.4	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.7	787.6	849.4	868.3
160°	741.6	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.7
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.5	810.5
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.9	800.3
177.5°	797.3	797.3	791.1	799.3	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)