

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: P519975

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519975
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-940-1D-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

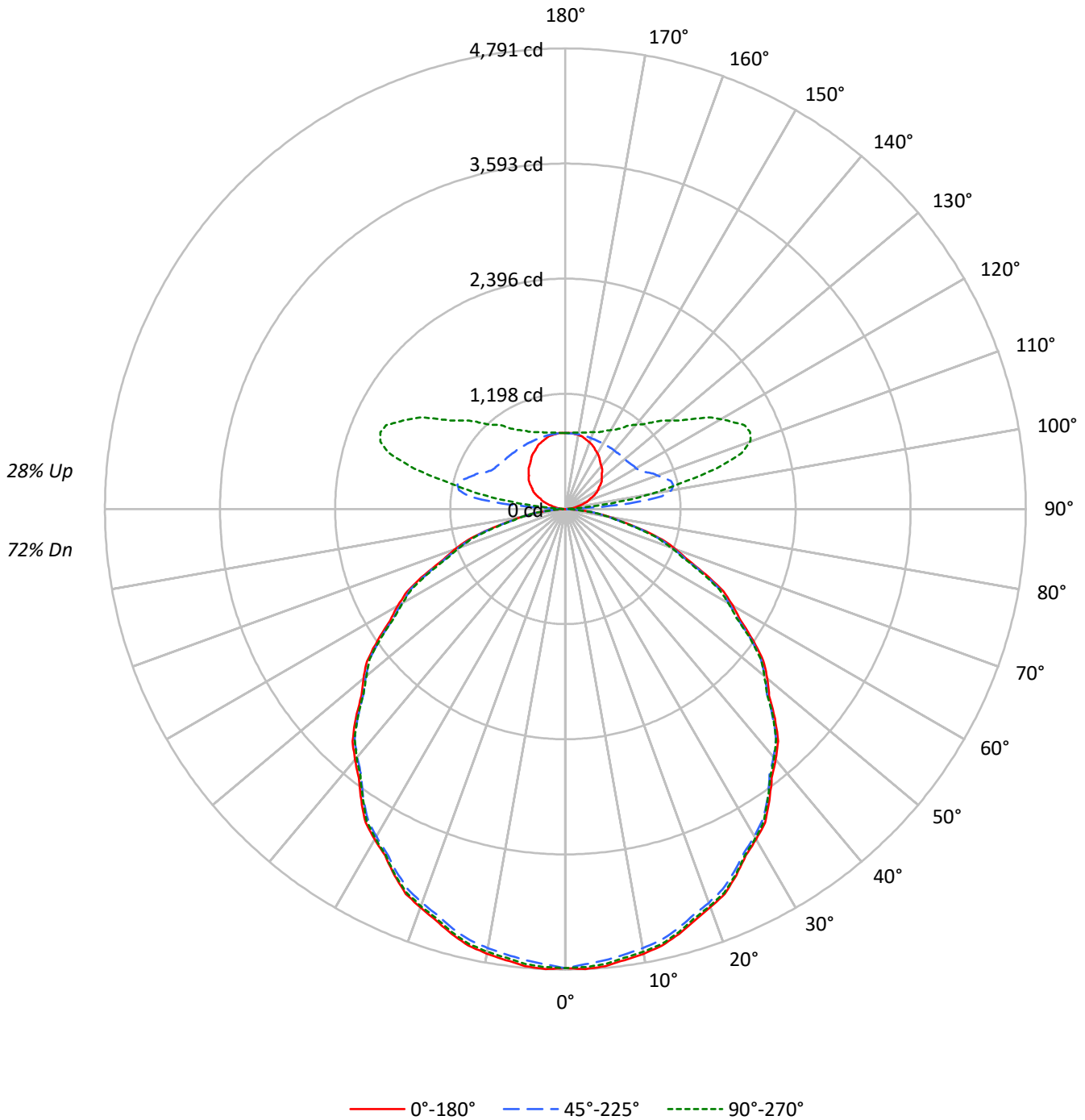
Lumens per Lamp: N/A
Luminaire Lumens: 18199.3 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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°	14688	14688	14688
5°	14736	14549	14671
10°	14668	14488	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14119	14235
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13410	13261	13284
50°	13117	12965	12928
55°	12783	12599	12571
60°	12368	12093	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9495	9214
80°	7915	7681	7633
85°	4732	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.6	2.5
10°-20°	1283.4	7.1
20°-30°	1928.2	10.6
30°-40°	2300.7	12.6
40°-50°	2358.3	13.0
50°-60°	2102.0	11.5
60°-70°	1564.8	8.6
70°-80°	847.7	4.7
80°-90°	197.7	1.1
90°-100°	379.8	2.1
100°-110°	1031.8	5.7
110°-120°	1060.8	5.8
120°-130°	848.2	4.7
130°-140°	666.4	3.7
140°-150°	511.0	2.8
150°-160°	367.5	2.0
160°-170°	224.7	1.2
170°-180°	75.7	0.4
0°-30°	3662.2	20.1
0°-40°	5962.9	32.8
0°-60°	10423.1	57.3
0°-90°	13033.3	71.6
90°-120°	2472.4	13.6
90°-150°	4498.0	24.7
90°-180°	5166.0	28.4
0°-180°	18199.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4776	4776	4776	4776	4776	
5°	4773	4766	4713	4755	4752	453
15°	4576	4566	4521	4560	4558	1290
25°	4206	4198	4161	4185	4195	1937
35°	3701	3698	3669	3669	3672	2314
45°	3083	3076	3049	3044	3054	2376
55°	2384	2376	2350	2332	2345	2129
65°	1611	1601	1577	1566	1556	1595
75°	818	818	799	783	775	868
85°	134	152	152	155	152	185
90°	3	10	18	23	23	7
95°	56	208	662	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°	4776.0	4776.0	4776.0	4776.0	4776.0
2.5°	4790.7	4782.5	4740.2	4775.8	4769.7
5°	4773.4	4765.7	4712.9	4754.9	4752.3
7.5°	4732.8	4723.1	4675.1	4714.4	4709.7
10°	4697.1	4689.4	4639.3	4678.7	4676.1
12.5°	4653.0	4645.3	4595.2	4634.5	4634.0
15°	4576.2	4565.9	4521.0	4560.4	4557.8
17.5°	4484.2	4472.3	4428.0	4459.1	4464.2
20°	4410.6	4402.9	4360.7	4389.7	4394.8
22.5°	4334.9	4325.2	4280.8	4314.0	4319.1
25°	4205.6	4197.9	4160.9	4184.8	4195.1
27.5°	4063.7	4063.7	4029.4	4046.5	4052.7
30°	3969.0	3969.0	3934.9	3945.6	3955.9
32.5°	3868.1	3859.9	3827.7	3836.3	3846.5
35°	3701.0	3698.3	3669.3	3669.4	3672.0
37.5°	3528.0	3520.8	3489.0	3491.5	3503.8
40°	3403.9	3398.7	3367.1	3367.3	3377.6
42.5°	3277.7	3272.5	3245.2	3241.0	3245.2
45°	3083.2	3075.5	3049.1	3044.0	3054.3
47.5°	2876.1	2878.2	2846.7	2839.5	2845.0
50°	2741.6	2741.6	2709.9	2694.3	2702.1
52.5°	2600.6	2596.5	2564.9	2547.4	2565.4
55°	2384.1	2376.3	2349.8	2331.8	2344.6
57.5°	2162.2	2150.4	2123.8	2104.1	2111.3
60°	2010.8	1992.8	1966.1	1950.4	1955.6
62.5°	1853.1	1843.3	1814.7	1790.8	1802.1
65°	1611.3	1601.0	1577.1	1566.4	1556.1
67.5°	1374.2	1367.5	1340.6	1329.3	1322.6
70°	1214.4	1201.5	1182.8	1169.6	1167.1
72.5°	1058.7	1043.8	1025.1	1013.9	1007.2
75°	817.5	817.5	799.1	783.1	775.4
77.5°	587.7	589.8	574.6	569.3	565.6
80°	446.9	446.9	433.7	428.5	431.0
82.5°	312.3	318.4	313.9	306.4	302.8
85°	134.1	152.0	152.4	155.1	152.4
87.5°	23.6	39.6	43.6	40.3	36.3
90°	2.6	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.7	77.6	65.6
95°	55.9	207.7	661.5	287.9	193.3
97.5°	92.6	229.4	1014.1	789.0	554.1
100°	117.1	243.8	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.6	1213.5
105°	183.2	285.2	1134.7	1727.7	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.1	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	2082.6
115°	325.6	395.3	908.2	1806.8	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.8
122.5°	414.2	478.9	837.5	1501.1	1772.2
125°	447.8	510.0	821.7	1384.5	1633.3
127.5°	477.8	539.4	813.1	1296.2	1509.6
130°	496.0	555.8	809.0	1240.7	1432.3
132.5°	514.4	574.2	804.9	1193.4	1363.1
135°	539.3	599.1	798.9	1127.7	1272.0
137.5°	566.3	620.6	795.7	1069.7	1191.1
140°	582.6	634.8	793.8	1032.8	1142.3
142.5°	598.9	647.2	791.7	1004.0	1095.5
145°	623.3	668.1	788.7	958.2	1030.4
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.0	701.4	786.1	901.6	946.4
152.5°	683.4	711.7	784.0	883.1	920.0
155°	704.7	729.6	783.6	860.5	885.3
157.5°	725.6	745.0	783.6	845.1	863.9
160°	737.7	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	819.3	821.7
167.5°	777.0	781.9	788.7	810.5	812.6
170°	781.0	786.0	788.7	806.4	806.4
172.5°	785.1	788.1	788.7	802.4	802.4
175°	791.2	793.7	788.7	798.8	796.3
177.5°	793.3	793.3	787.1	795.1	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)