

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: P519966

Luminaire Tested: **SQ4-F-050U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519966
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-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

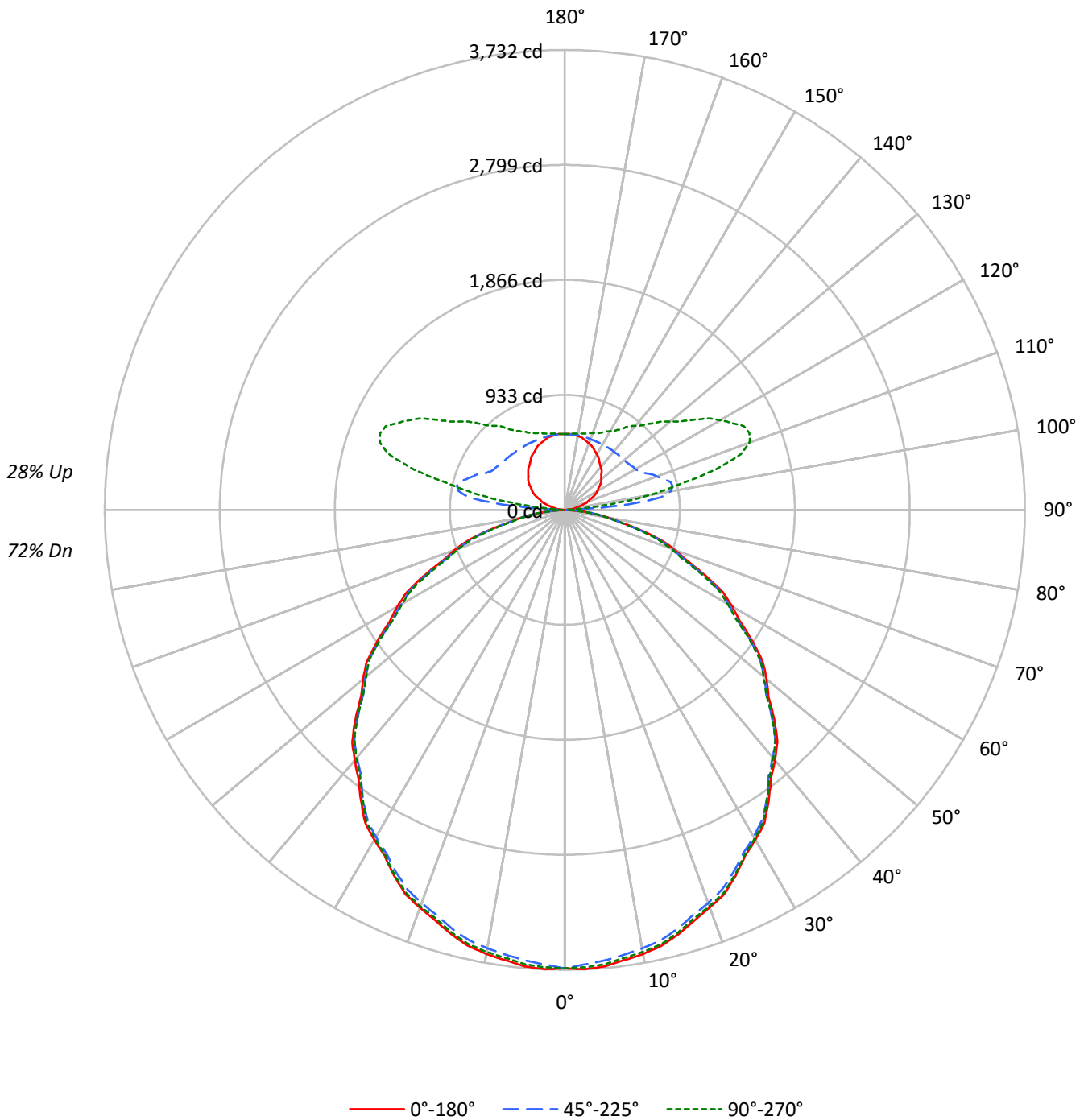
Lumens per Lamp: N/A
Luminaire Lumens: 14176.1 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 111.4
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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CATALOG NUMBER: SQ4-F-050U-125D-840-1D-UNV-STD-W-8

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°	17162	17162	17162
5°	17217	17000	17142
10°	17139	16928	17062
15°	17023	16819	16956
20°	16866	16675	16806
25°	16674	16497	16633
30°	16468	16326	16414
35°	16234	16096	16107
40°	15967	15794	15844
45°	15668	15494	15521
50°	15326	15149	15106
55°	14936	14721	14689
60°	14451	14130	14054
65°	13699	13410	13231
70°	12758	12428	12260
75°	11350	11093	10765
80°	9245	8974	8921
85°	5526	6288	6288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.0	2.5
10°-20°	999.7	7.1
20°-30°	1501.9	10.6
30°-40°	1792.1	12.6
40°-50°	1836.9	13.0
50°-60°	1637.3	11.5
60°-70°	1218.9	8.6
70°-80°	660.3	4.7
80°-90°	154.0	1.1
90°-100°	295.9	2.1
100°-110°	803.7	5.7
110°-120°	826.3	5.8
120°-130°	660.7	4.7
130°-140°	519.1	3.7
140°-150°	398.0	2.8
150°-160°	286.2	2.0
160°-170°	175.1	1.2
170°-180°	59.0	0.4
0°-30°	2852.6	20.1
0°-40°	4644.7	32.8
0°-60°	8119.0	57.3
0°-90°	10152.1	71.6
90°-120°	1925.9	13.6
90°-150°	3503.7	24.7
90°-180°	4024.0	28.4
0°-180°	14176.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3720	3720	3720	3720	3720	
5°	3718	3712	3671	3704	3702	353
15°	3564	3556	3522	3552	3550	1005
25°	3276	3270	3241	3260	3268	1509
35°	2883	2881	2858	2858	2860	1803
45°	2402	2396	2375	2371	2379	1851
55°	1857	1851	1830	1816	1826	1659
65°	1255	1247	1228	1220	1212	1243
75°	637	637	622	610	604	676
85°	104	118	119	121	119	144
90°	2	8	14	18	18	6
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1408	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

TEST NUMBER: P519966

CATALOG NUMBER: SQ4-F-050U-125D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3720.2	3720.2	3720.2	3720.2	3720.2
2.5°	3731.7	3725.3	3692.3	3720.1	3715.3
5°	3718.1	3712.1	3671.1	3703.8	3701.8
7.5°	3686.6	3679.0	3641.6	3672.2	3668.6
10°	3658.8	3652.7	3613.7	3644.4	3642.4
12.5°	3624.3	3618.4	3579.3	3610.0	3609.6
15°	3564.5	3556.5	3521.6	3552.3	3550.3
17.5°	3492.9	3483.7	3449.1	3473.3	3477.4
20°	3435.6	3429.5	3396.7	3419.3	3423.3
22.5°	3376.6	3369.0	3334.5	3360.3	3364.4
25°	3275.9	3269.9	3241.1	3259.7	3267.7
27.5°	3165.3	3165.3	3138.7	3151.9	3156.7
30°	3091.6	3091.6	3065.0	3073.4	3081.4
32.5°	3013.0	3006.6	2981.5	2988.2	2996.2
35°	2882.7	2880.8	2858.2	2858.2	2860.2
37.5°	2748.1	2742.5	2717.7	2719.6	2729.2
40°	2651.5	2647.4	2622.8	2623.0	2631.0
42.5°	2553.2	2549.1	2527.7	2524.6	2527.7
45°	2401.6	2395.7	2375.0	2371.1	2379.1
47.5°	2240.3	2241.9	2217.4	2211.7	2216.2
50°	2135.5	2135.5	2110.9	2098.8	2104.8
52.5°	2025.7	2022.6	1997.8	1984.3	1998.3
55°	1857.1	1851.0	1830.4	1816.3	1826.4
57.5°	1684.3	1675.0	1654.4	1638.9	1644.5
60°	1566.3	1552.3	1531.5	1519.3	1523.3
62.5°	1443.5	1435.9	1413.6	1394.9	1403.7
65°	1255.0	1247.0	1228.5	1220.1	1212.1
67.5°	1070.4	1065.2	1044.2	1035.5	1030.2
70°	945.9	935.9	921.4	911.1	909.0
72.5°	824.7	813.0	798.4	789.7	784.6
75°	636.8	636.8	622.4	610.0	604.0
77.5°	457.8	459.4	447.6	443.4	440.6
80°	348.0	348.0	337.8	333.8	335.8
82.5°	243.2	248.0	244.5	238.7	235.8
85°	104.4	118.5	118.8	120.7	118.8
87.5°	18.4	30.8	34.0	31.4	28.3
90°	2.0	7.8	13.8	17.9	17.9
92.5°	17.9	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.3	224.2	150.6
97.5°	72.1	178.7	789.8	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.3	896.1	1095.6	945.3
105°	142.7	222.2	883.8	1345.7	1266.3
107.5°	176.3	246.5	832.7	1474.9	1497.0
110°	200.2	264.1	794.6	1500.3	1595.2

TEST NUMBER: P519966

CATALOG NUMBER: SQ4-F-050U-125D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.7	307.9	707.4	1407.5	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.7	397.2	640.1	1078.4	1272.2
127.5°	372.1	420.2	633.3	1009.6	1175.9
130°	386.4	432.9	630.2	966.5	1115.6
132.5°	400.7	447.2	626.9	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.7	494.5	618.3	804.5	889.7
142.5°	466.5	504.1	616.6	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.8	612.3	718.4	762.6
150°	521.2	546.4	612.3	702.3	737.1
152.5°	532.2	554.3	610.8	687.9	716.5
155°	548.9	568.3	610.4	670.2	689.6
157.5°	565.1	580.2	610.4	658.2	673.0
160°	574.6	588.3	610.4	650.2	661.9
162.5°	584.2	594.7	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.2	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.2
180°	616.2	616.2	616.2	616.2	616.2

(END OF REPORT)