

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P511749

Luminaire Tested: **SQW-F-050U-025D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511749
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-16,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-050U-025D-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

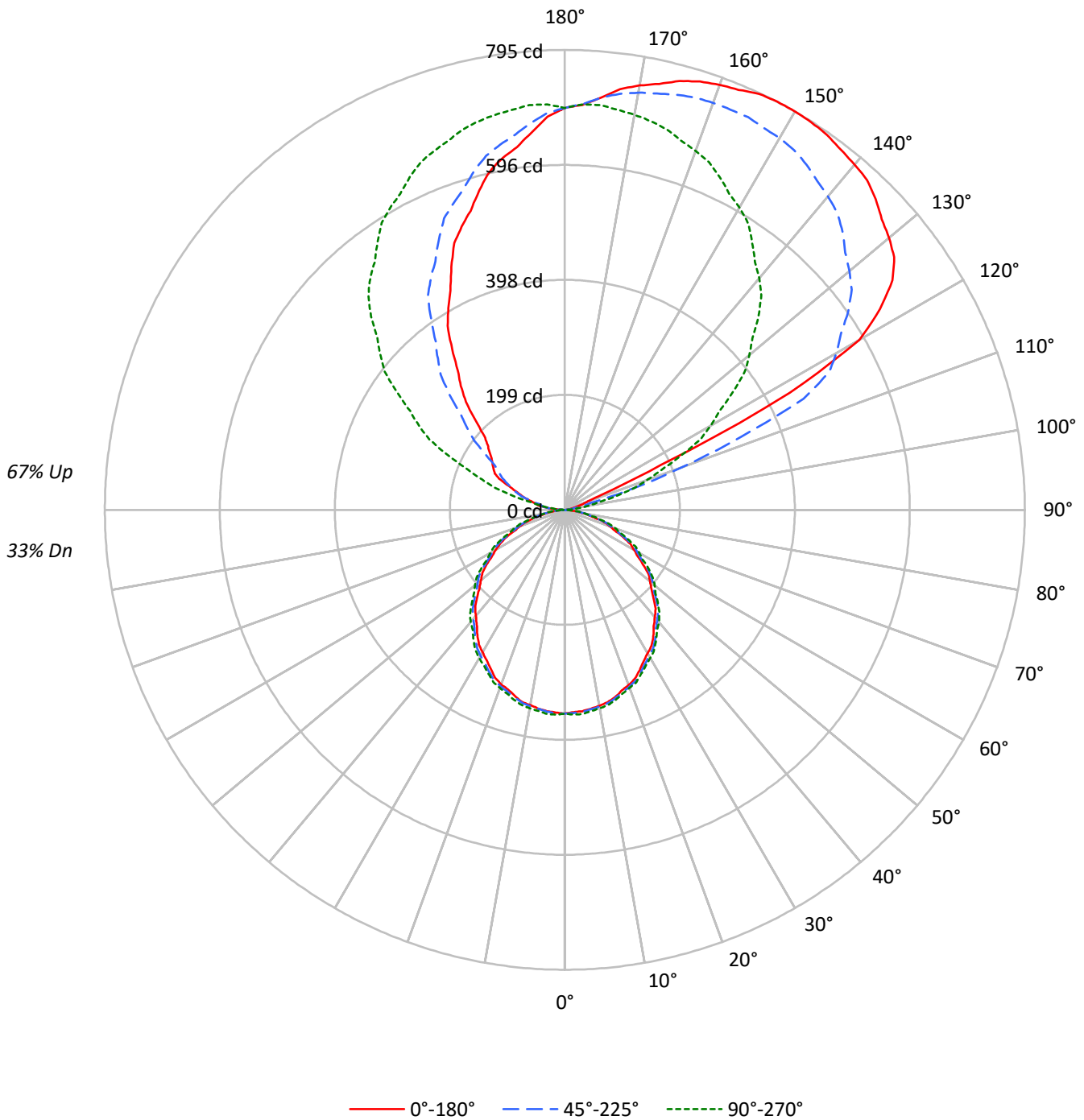
Lumens per Lamp: N/A
Luminaire Lumens: 2890.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 23.2
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	41	41	41	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	23	19	16	17	14	13	10
9	48	36	28	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	11373	11373	11373
5°	11326	11478	11326
10°	11270	11424	11240
15°	11209	11367	11146
20°	11069	11261	11034
25°	10906	11142	10803
30°	10675	11026	10605
35°	10506	10841	10395
40°	10201	10678	10083
45°	9933	10367	9805
50°	9651	10173	9510
55°	9278	9914	9278
60°	8880	9610	8880
65°	8420	9207	8420
70°	7827	8715	7733
75°	6812	7873	6937
80°	5597	6471	5783
85°	3149	4520	3853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.3	1.2
10°-20°	94.8	3.3
20°-30°	142.0	4.9
30°-40°	168.5	5.8
40°-50°	171.2	5.9
50°-60°	152.5	5.3
60°-70°	113.9	3.9
70°-80°	62.6	2.2
80°-90°	15.1	0.5
90°-100°	17.0	0.6
100°-110°	78.0	2.7
110°-120°	228.6	7.9
120°-130°	344.1	11.9
130°-140°	369.6	12.8
140°-150°	352.7	12.2
150°-160°	290.2	10.0
160°-170°	190.0	6.6
170°-180°	65.9	2.3
0°-30°	270.0	9.3
0°-40°	438.4	15.2
0°-60°	762.2	26.4
0°-90°	953.8	33.0
90°-120°	323.6	11.2
90°-150°	1390.0	48.1
90°-180°	1936.0	67.0
0°-180°	2890.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	352	352	352	352	352	
5°	349	350	354	350	349	33
15°	335	337	340	335	333	94
25°	306	310	313	309	303	141
35°	266	272	275	270	264	166
45°	218	224	227	222	215	168
55°	165	172	176	170	165	148
65°	110	115	120	115	110	109
75°	55	58	63	58	56	59
85°	8	11	12	12	10	12
90°	1	1	1	2	4	1
95°	5	6	13	21	20	6
105°	21	50	89	59	63	25
115°	183	455	222	112	123	245
125°	692	598	354	167	154	608
135°	760	679	473	281	216	586
145°	790	728	564	404	340	495
155°	793	749	634	515	464	366
165°	767	743	681	606	571	218
175°	715	715	702	671	655	69
180°	694	694	694	694	694	



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CATALOG NUMBER: SQW-F-050U-025D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2	352.2
2.5°	350.0	351.4	351.5	351.5	354.5	351.5	351.5	351.4	350.7
5°	349.4	349.4	350.3	350.4	354.1	350.4	350.3	349.4	349.4
7.5°	346.8	346.9	347.9	347.8	350.7	346.8	346.9	346.7	346.6
10°	343.7	344.7	345.6	344.8	348.4	343.8	344.7	343.7	342.8
12.5°	340.7	341.6	342.6	341.7	345.4	341.6	341.7	340.7	340.5
15°	335.3	336.2	337.1	336.3	340.0	335.4	335.3	334.3	333.4
17.5°	327.4	329.0	330.4	329.5	333.0	328.6	329.4	327.1	325.7
20°	322.1	323.0	325.8	325.0	327.7	324.0	324.9	321.1	321.1
22.5°	316.0	317.0	319.8	319.0	322.5	318.0	318.9	315.1	314.4
25°	306.1	307.0	309.8	309.0	312.7	308.1	308.9	304.2	303.2
27.5°	294.6	295.7	300.2	299.4	303.2	297.7	298.5	293.8	292.7
30°	286.3	288.1	291.9	291.1	295.7	290.2	291.0	286.2	284.4
32.5°	278.8	280.6	283.7	284.3	287.4	282.6	282.7	278.0	276.1
35°	266.5	268.4	272.2	272.2	275.0	270.4	270.3	265.5	263.7
37.5°	252.6	254.2	258.4	259.6	261.6	257.4	256.3	251.6	249.8
40°	242.0	242.9	248.6	250.6	253.3	246.9	245.8	241.0	239.2
42.5°	232.2	233.9	238.8	240.0	242.0	237.8	236.0	231.3	229.4
45°	217.5	219.4	224.1	226.0	227.0	223.3	222.3	217.5	214.7
47.5°	202.7	204.5	209.3	211.3	212.3	209.5	206.6	202.6	199.8
50°	192.1	194.0	198.7	201.6	202.5	199.7	196.8	192.1	189.3
52.5°	182.3	183.4	188.2	191.7	191.9	189.9	186.3	181.5	179.5
55°	164.8	167.6	172.3	176.1	176.1	174.3	170.5	165.7	164.8
57.5°	149.5	150.7	155.4	159.2	159.3	158.2	154.4	149.7	148.8
60°	137.5	139.3	144.1	147.9	148.8	147.0	143.1	138.4	137.5
62.5°	127.7	128.1	132.8	136.6	137.5	135.7	131.8	127.9	126.2
65°	110.2	111.1	114.9	119.6	120.5	118.7	114.9	111.1	110.2
67.5°	93.4	94.3	97.9	102.5	103.6	101.8	97.0	94.2	93.2
70°	82.9	83.8	86.6	90.4	92.3	90.4	85.7	82.9	81.9
72.5°	71.6	72.5	75.3	79.1	80.2	78.4	74.4	72.3	71.4
75°	54.6	56.5	58.4	62.2	63.1	62.2	58.4	56.5	55.6
77.5°	39.9	40.9	42.8	45.4	46.1	45.4	43.7	40.9	40.9
80°	30.1	31.1	33.0	34.8	34.8	34.8	33.9	31.1	31.1
82.5°	21.1	22.0	23.2	25.8	25.1	25.8	24.9	22.8	22.0
85°	8.5	9.4	11.3	13.2	12.2	13.2	12.2	10.4	10.4
87.5°	0.9	1.7	1.7	4.0	4.0	4.7	3.4	2.8	3.0
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	3.9
92.5°	2.5	2.5	2.5	3.3	3.3	7.9	5.8	5.3	6.2
95°	4.8	4.8	5.8	14.5	12.6	19.2	21.3	20.4	20.4
97.5°	8.5	8.5	11.1	38.6	28.5	26.2	35.9	37.0	36.7
100°	11.6	11.6	16.5	61.6	41.7	34.1	39.8	45.6	47.5
102.5°	14.7	15.5	25.0	95.4	58.8	43.6	45.2	51.1	53.0
105°	21.3	23.2	50.4	160.4	89.2	57.9	59.2	60.2	63.0
107.5°	31.6	38.6	127.8	228.9	125.9	76.0	78.6	75.5	75.7
110°	41.7	57.8	216.3	272.7	152.3	88.7	90.2	86.3	87.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	68.1	114.6	328.8	307.5	180.2	103.8	98.7	102.6	100.5
115°	183.3	299.0	454.9	357.7	222.1	129.2	111.5	120.3	123.2
117.5°	438.0	516.2	514.3	400.2	263.8	159.9	123.4	131.6	136.4
120°	587.8	599.2	542.2	426.6	291.0	181.0	131.9	137.8	142.6
122.5°	646.0	632.3	565.5	450.7	316.6	203.5	143.6	142.5	148.0
125°	691.6	666.9	597.5	484.0	354.0	241.2	166.8	151.4	154.2
127.5°	717.4	690.1	625.0	515.2	392.1	278.8	197.7	166.0	164.3
130°	731.3	704.8	642.1	534.7	416.1	305.1	220.2	178.4	173.6
132.5°	743.0	718.7	657.6	553.4	439.4	330.7	244.2	196.9	188.4
135°	759.5	736.7	679.0	578.6	473.3	367.1	281.3	228.6	216.3
137.5°	773.4	750.3	697.0	602.6	502.6	402.7	317.4	267.4	253.0
140°	778.9	758.0	707.1	616.7	522.8	425.1	341.4	290.7	279.3
142.5°	784.3	764.2	716.4	630.7	539.9	446.7	366.3	315.5	303.4
145°	790.5	770.6	728.4	648.9	564.5	478.2	403.5	351.8	339.5
147.5°	793.8	776.0	737.4	664.3	588.6	507.2	440.2	388.1	376.9
150°	795.4	778.3	742.0	674.4	603.3	526.5	462.7	413.0	402.5
152.5°	795.4	777.5	744.3	682.3	615.7	544.2	484.4	437.0	427.4
155°	793.4	776.4	748.8	692.2	634.4	569.9	515.0	474.1	463.6
157.5°	785.7	775.4	748.8	701.3	650.5	593.7	544.9	508.4	499.1
160°	781.8	772.3	748.8	706.1	660.5	608.4	563.5	529.4	520.9
162.5°	776.4	766.9	747.3	709.3	669.1	621.5	581.4	548.1	541.8
165°	767.2	757.8	743.0	712.2	680.9	640.1	606.2	577.9	571.3
167.5°	754.2	748.9	737.0	713.1	688.1	656.8	627.2	604.5	599.2
170°	744.9	741.1	732.3	712.5	693.5	666.0	641.1	621.7	617.9
172.5°	733.3	731.0	725.3	711.8	697.4	675.2	654.3	635.6	632.6
175°	714.9	716.8	714.9	708.9	702.2	687.1	671.2	657.6	654.7
177.5°	700.7	700.7	702.2	702.2	701.5	693.9	686.7	679.0	680.5
180°	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5

(END OF REPORT)