

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: P519916

Luminaire Tested: **SQ4-F-050U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519916
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

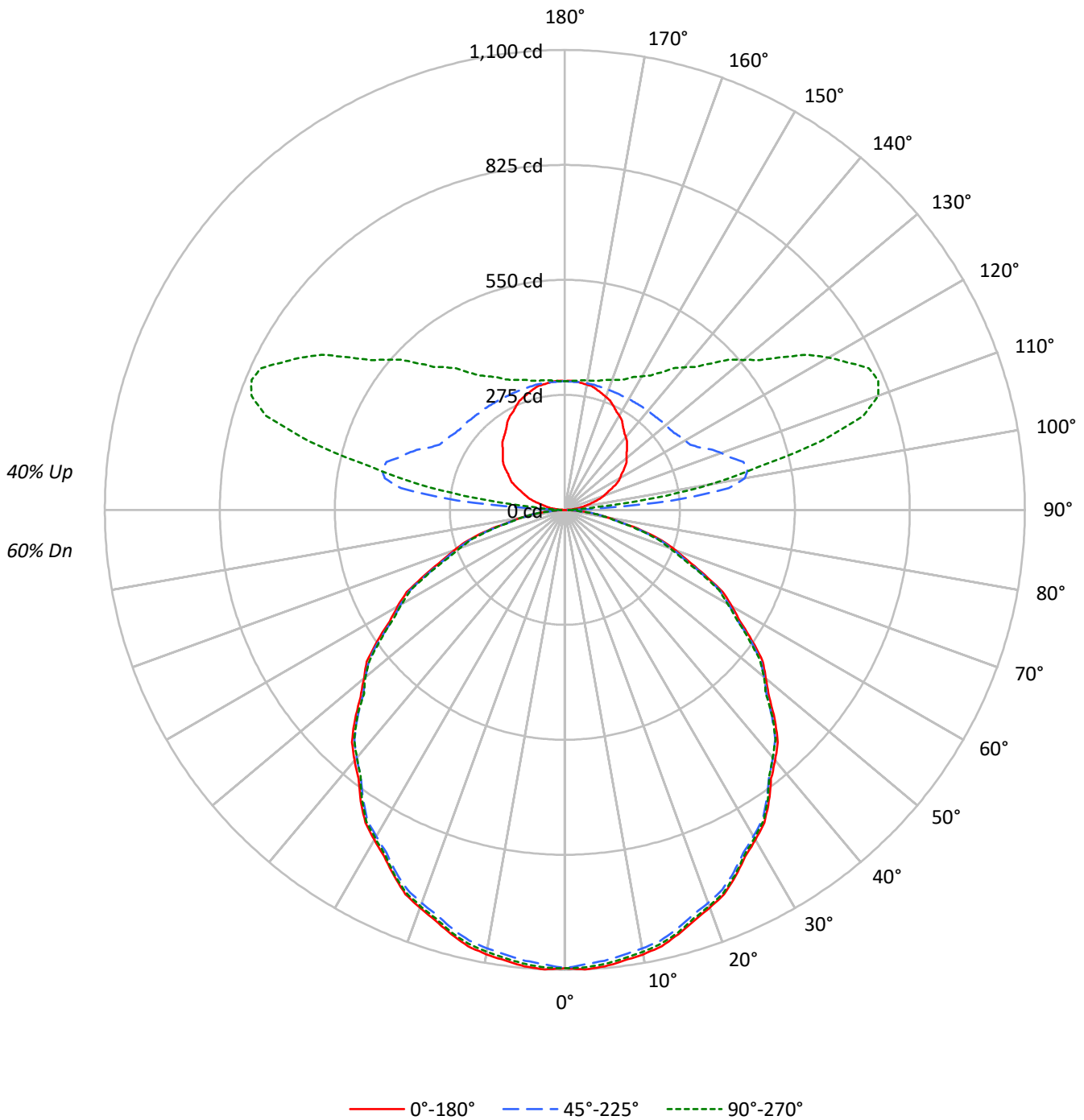
Lumens per Lamp: N/A
Luminaire Lumens: 5006.1 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10115	10115	10115
5°	10153	10026	10098
10°	10112	9982	10057
15°	10035	9912	9997
20°	9945	9827	9906
25°	9836	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9421	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8792	8683	8601
60°	8510	8364	8289
65°	8049	7898	7789
70°	7561	7375	7186
75°	6802	6556	6413
80°	5435	5334	5281
85°	3260	3684	3790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.5	2.1
10°-20°	294.6	5.9
20°-30°	442.6	8.8
30°-40°	528.1	10.5
40°-50°	541.6	10.8
50°-60°	482.6	9.6
60°-70°	359.8	7.2
70°-80°	195.1	3.9
80°-90°	46.0	0.9
90°-100°	147.9	3.0
100°-110°	401.8	8.0
110°-120°	413.2	8.3
120°-130°	330.3	6.6
130°-140°	259.6	5.2
140°-150°	199.0	4.0
150°-160°	143.1	2.9
160°-170°	87.5	1.7
170°-180°	29.5	0.6
0°-30°	840.7	16.8
0°-40°	1368.8	27.3
0°-60°	2393.1	47.8
0°-90°	2994.1	59.8
90°-120°	963.0	19.2
90°-150°	1751.9	35.0
90°-180°	2012.0	40.2
0°-180°	5006.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1096	1096	1096	1096	1096	
5°	1096	1094	1082	1091	1090	104
15°	1051	1049	1038	1046	1047	296
25°	966	965	956	961	963	445
35°	851	849	842	842	846	532
45°	710	707	701	701	703	546
55°	547	546	540	535	535	488
65°	369	369	362	358	357	367
75°	191	187	184	181	180	200
85°	31	33	35	35	36	43
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	496	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1096.3	1096.3	1096.3	1096.3	1096.3
2.5°	1100.3	1098.0	1088.4	1096.3	1095.6
5°	1096.3	1094.4	1082.5	1091.3	1090.3
7.5°	1087.4	1085.2	1073.5	1082.5	1082.3
10°	1079.4	1076.6	1065.5	1074.5	1073.5
12.5°	1069.1	1066.2	1055.2	1064.2	1063.2
15°	1050.6	1048.7	1037.7	1045.7	1046.6
17.5°	1029.5	1025.9	1016.0	1023.8	1024.8
20°	1012.9	1009.9	1000.9	1007.9	1008.9
22.5°	995.4	992.4	983.5	990.4	991.3
25°	966.2	965.2	956.2	961.2	963.2
27.5°	934.6	931.8	924.6	928.4	930.3
30°	911.4	909.6	901.5	904.5	906.5
32.5°	887.6	886.4	879.3	880.7	883.4
35°	850.8	848.9	841.9	842.0	845.9
37.5°	810.1	807.9	802.1	801.1	802.7
40°	782.2	779.4	774.3	773.3	773.3
42.5°	753.6	751.5	744.8	743.2	745.4
45°	709.7	706.8	700.7	700.7	702.7
47.5°	662.2	661.0	654.0	650.9	651.6
50°	627.2	629.1	622.2	618.3	622.2
52.5°	596.9	595.8	589.6	585.7	587.2
55°	546.6	545.7	539.8	534.7	534.7
57.5°	496.2	493.7	487.4	483.8	486.6
60°	461.2	460.2	453.3	446.4	449.2
62.5°	426.2	424.4	417.4	412.9	415.1
65°	368.7	368.7	361.8	357.8	356.8
67.5°	318.4	313.8	309.9	305.2	303.8
70°	280.3	276.4	273.4	269.3	266.4
72.5°	243.0	240.6	236.0	231.9	231.4
75°	190.8	187.0	183.9	180.9	179.9
77.5°	135.8	135.0	132.2	130.6	131.2
80°	102.3	102.3	100.4	100.4	99.4
82.5°	72.1	72.9	72.5	71.0	70.8
85°	30.8	32.8	34.8	34.8	35.8
87.5°	5.8	10.2	10.1	10.5	10.5
90°	1.0	3.9	7.0	8.9	8.9
92.5°	8.9	40.5	70.4	30.2	25.6
95°	21.8	80.9	257.6	112.2	75.3
97.5°	36.1	89.4	395.0	307.2	215.8
100°	45.5	95.0	437.0	443.0	357.7
102.5°	55.1	100.6	448.1	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.2	416.4	737.4	748.4
110°	100.1	132.1	397.3	750.1	797.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.8	703.7	801.6
117.5°	142.3	168.3	338.1	652.8	763.1
120°	152.6	177.8	330.9	618.8	728.2
122.5°	161.3	186.5	326.2	584.7	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.9	588.0
130°	193.2	216.5	315.1	483.2	557.9
132.5°	200.4	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.2	439.2	495.5
137.5°	220.6	241.7	309.9	416.7	463.9
140°	226.9	247.3	309.1	402.2	444.9
142.5°	233.3	252.0	308.3	391.0	426.7
145°	242.8	260.2	307.1	373.2	401.2
147.5°	253.5	268.4	306.2	359.2	381.2
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.2	305.2	335.1	344.8
157.5°	282.6	290.2	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	322.0	326.2
165°	297.2	301.2	306.2	319.1	320.0
167.5°	302.6	304.5	307.1	315.7	316.5
170°	304.2	306.2	307.1	314.1	314.1
172.5°	305.8	306.9	307.1	312.5	312.5
175°	308.1	309.1	307.1	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)