

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: P520012

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520012
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

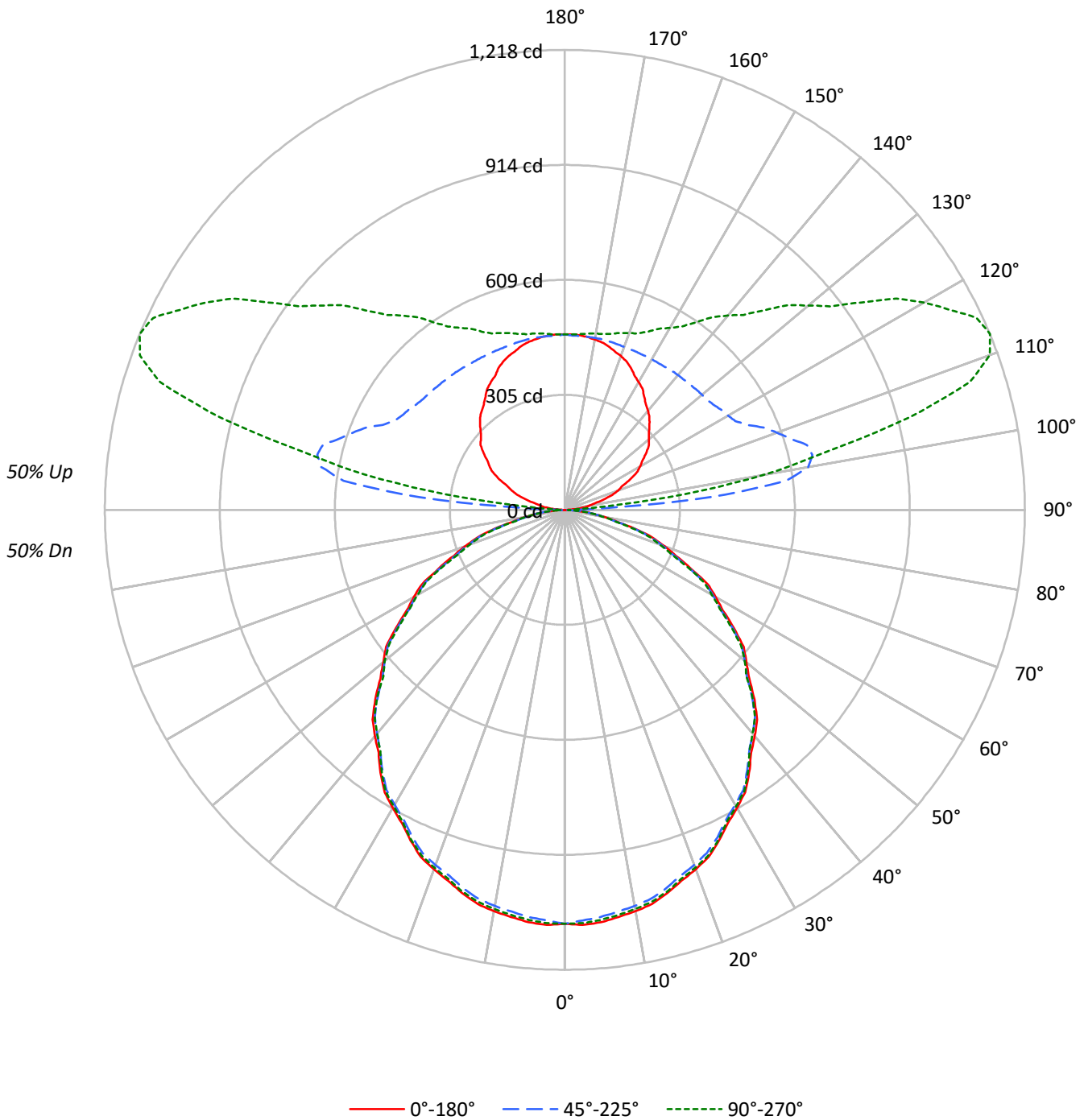
Lumens per Lamp: N/A
Luminaire Lumens: 6018.0 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.7
10°-20°	294.6	4.9
20°-30°	442.6	7.4
30°-40°	528.1	8.8
40°-50°	541.6	9.0
50°-60°	482.6	8.0
60°-70°	359.8	6.0
70°-80°	195.1	3.2
80°-90°	46.0	0.8
90°-100°	218.9	3.6
100°-110°	602.3	10.0
110°-120°	621.7	10.3
120°-130°	498.1	8.3
130°-140°	391.2	6.5
140°-150°	299.8	5.0
150°-160°	215.6	3.6
160°-170°	131.8	2.2
170°-180°	44.4	0.7
0°-30°	840.7	14.0
0°-40°	1368.8	22.7
0°-60°	2393.1	39.8
0°-90°	2994.1	49.8
90°-120°	1443.0	24.0
90°-150°	2632.1	43.7
90°-180°	3024.0	50.2
0°-180°	6018.0	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	3
95°	33	120	387	166	106	34
105°	108	166	664	1011	943	114
115°	191	232	532	1060	1203	188
125°	263	299	483	817	957	234
135°	317	352	469	661	748	245
145°	366	392	462	563	606	230
155°	415	428	459	506	520	191
165°	448	454	461	480	483	126
175°	464	465	462	468	467	44
180°	464	464	464	464	464	

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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	6.9	8.9	8.9
92.5°	13.6	58.2	100.9	38.7	31.8
95°	32.6	119.5	387.1	165.5	105.6
97.5°	53.1	132.5	590.8	455.2	321.2
100°	68.2	140.6	654.8	660.9	539.2
102.5°	82.4	150.1	671.4	820.0	708.4
105°	107.7	165.6	663.7	1010.8	943.2
107.5°	131.8	184.7	625.9	1104.2	1124.2
110°	149.2	197.4	597.5	1127.5	1197.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.9	211.7	569.1	1112.5	1218.3
115°	190.6	232.1	532.3	1060.0	1202.9
117.5°	215.1	253.3	509.0	986.3	1148.0
120°	230.2	266.8	498.7	931.2	1098.2
122.5°	243.6	280.2	491.6	882.8	1041.3
125°	262.7	299.4	482.9	816.9	957.0
127.5°	280.9	315.8	477.2	762.1	884.9
130°	290.4	326.1	474.1	729.4	841.5
132.5°	301.5	337.2	471.6	700.7	802.0
135°	317.0	351.8	469.1	660.7	747.6
137.5°	331.7	363.9	467.0	628.3	700.0
140°	342.7	372.7	466.2	606.8	671.6
142.5°	352.2	379.8	464.6	587.7	643.1
145°	366.4	391.5	462.2	562.9	606.4
147.5°	381.6	403.3	461.0	541.0	575.8
150°	391.1	410.4	460.2	529.0	556.1
152.5°	399.8	417.6	459.4	518.6	541.0
155°	414.8	428.3	459.2	506.0	520.5
157.5°	425.7	436.6	459.2	495.6	505.7
160°	433.6	442.2	459.2	490.0	497.8
162.5°	439.9	447.0	460.0	485.2	491.4
165°	448.4	454.1	461.2	480.1	482.9
167.5°	454.3	458.7	462.2	475.7	476.4
170°	458.2	461.2	462.2	474.1	474.1
172.5°	461.4	462.7	462.2	471.6	470.9
175°	464.2	465.1	462.2	468.1	467.1
177.5°	465.0	465.0	461.8	466.5	465.0
180°	464.2	464.2	464.2	464.2	464.2

(END OF REPORT)