

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: P519969

Luminaire Tested: **SQ4-F-050U-125D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519969
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-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

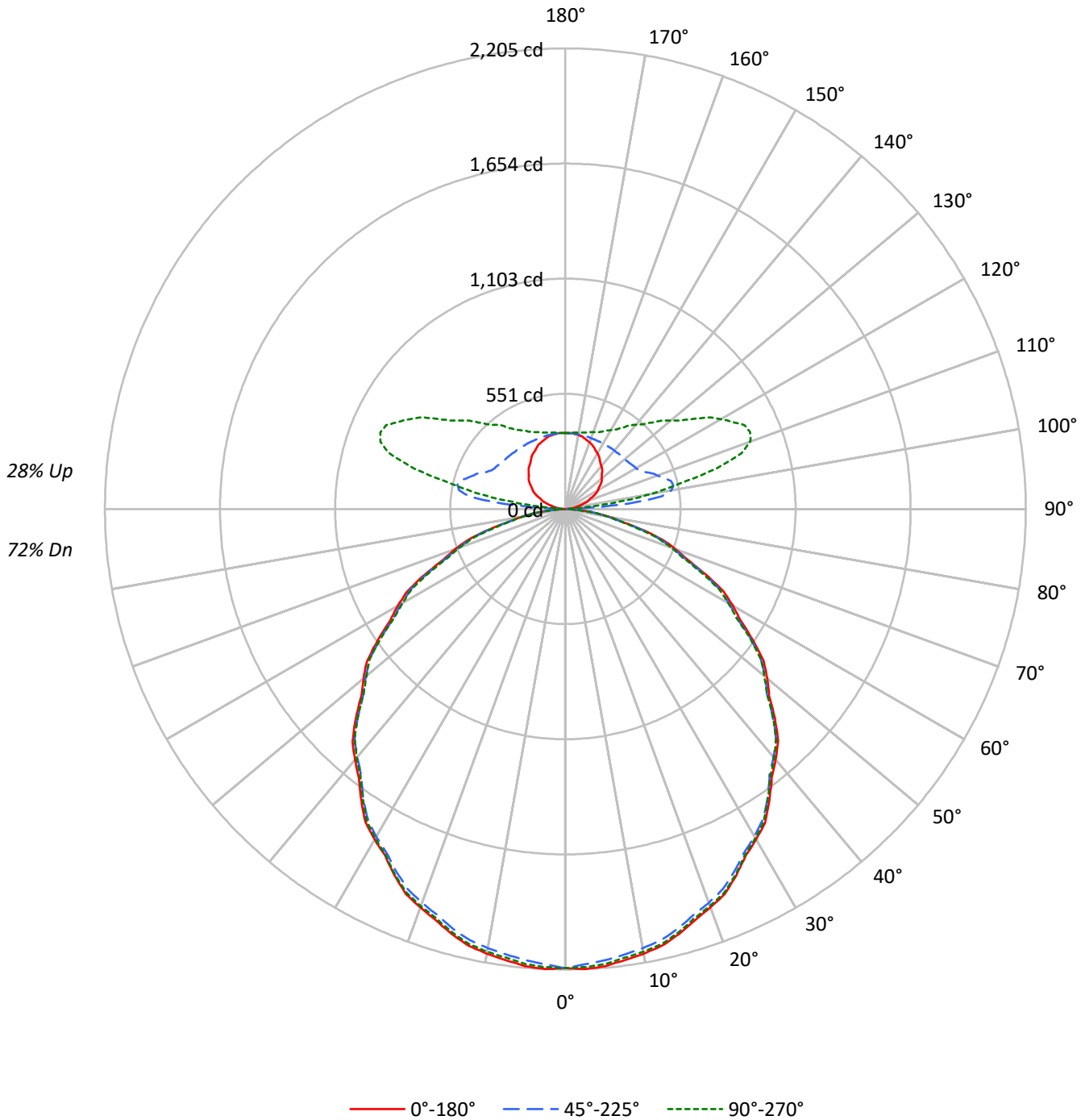
Lumens per Lamp: N/A
Luminaire Lumens: 8376.1 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 83.8
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°	13520	13520	13520
5°	13564	13393	13505
10°	13502	13336	13442
15°	13412	13250	13358
20°	13287	13137	13240
25°	13136	12996	13104
30°	12975	12863	12931
35°	12790	12681	12690
40°	12580	12443	12482
45°	12343	12207	12228
50°	12074	11934	11901
55°	11766	11598	11572
60°	11384	11132	11073
65°	10793	10565	10424
70°	10053	9790	9661
75°	8940	8741	8482
80°	7283	7070	7028
85°	4354	4947	4947



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.4	2.5
10°-20°	590.7	7.1
20°-30°	887.4	10.6
30°-40°	1058.9	12.6
40°-50°	1085.4	13.0
50°-60°	967.4	11.5
60°-70°	720.2	8.6
70°-80°	390.2	4.7
80°-90°	91.0	1.1
90°-100°	174.8	2.1
100°-110°	474.9	5.7
110°-120°	488.2	5.8
120°-130°	390.4	4.7
130°-140°	306.7	3.7
140°-150°	235.2	2.8
150°-160°	169.1	2.0
160°-170°	103.4	1.2
170°-180°	34.8	0.4
0°-30°	1685.5	20.1
0°-40°	2744.4	32.8
0°-60°	4797.2	57.3
0°-90°	5998.5	71.6
90°-120°	1137.9	13.6
90°-150°	2070.2	24.7
90°-180°	2378.0	28.4
0°-180°	8376.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2198	2198	2198	2198	2198	
5°	2197	2193	2169	2188	2187	208
15°	2106	2101	2081	2099	2098	594
25°	1936	1932	1915	1926	1931	891
35°	1703	1702	1689	1689	1690	1065
45°	1419	1416	1403	1401	1406	1093
55°	1097	1094	1082	1073	1079	980
65°	742	737	726	721	716	734
75°	376	376	368	360	357	400
85°	62	70	70	71	70	85
90°	1	5	8	10	10	3
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	307	363	441	474	180
155°	324	336	361	396	407	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2198.1	2198.1	2198.1	2198.1	2198.1
2.5°	2204.9	2201.2	2181.7	2198.1	2195.3
5°	2196.9	2193.4	2169.1	2188.5	2187.3
7.5°	2178.4	2173.8	2151.7	2169.7	2167.6
10°	2161.8	2158.3	2135.3	2153.3	2152.2
12.5°	2141.6	2138.0	2114.9	2133.0	2132.8
15°	2106.2	2101.4	2080.8	2098.9	2097.8
17.5°	2063.8	2058.5	2038.0	2052.3	2054.7
20°	2030.0	2026.4	2007.0	2020.3	2022.8
22.5°	1995.1	1990.7	1970.2	1985.5	1987.9
25°	1935.6	1932.1	1915.0	1926.1	1930.8
27.5°	1870.3	1870.3	1854.5	1862.3	1865.2
30°	1826.8	1826.8	1811.1	1815.9	1820.7
32.5°	1780.2	1776.5	1761.7	1765.6	1770.4
35°	1703.3	1702.2	1688.8	1688.8	1690.0
37.5°	1623.8	1620.4	1605.8	1606.9	1612.6
40°	1566.7	1564.3	1549.7	1549.8	1554.5
42.5°	1508.6	1506.2	1493.6	1491.7	1493.6
45°	1419.0	1415.5	1403.3	1401.0	1405.7
47.5°	1323.8	1324.7	1310.2	1306.8	1309.5
50°	1261.8	1261.8	1247.2	1240.1	1243.7
52.5°	1197.0	1195.0	1180.4	1172.4	1180.7
55°	1097.2	1093.7	1081.5	1073.2	1079.1
57.5°	995.2	989.7	977.5	968.4	971.7
60°	925.4	917.2	904.9	897.7	900.1
62.5°	852.9	848.4	835.2	824.2	829.5
65°	741.6	736.8	725.9	720.9	716.2
67.5°	632.4	629.4	617.0	611.9	608.7
70°	559.0	553.0	544.4	538.3	537.2
72.5°	487.3	480.4	471.8	466.6	463.6
75°	376.2	376.2	367.8	360.4	356.9
77.5°	270.5	271.4	264.4	262.0	260.4
80°	205.6	205.6	199.6	197.2	198.4
82.5°	143.7	146.6	144.4	141.0	139.4
85°	61.7	69.9	70.1	71.4	70.1
87.5°	10.8	18.2	20.1	18.5	16.7
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.3	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.6	492.0	871.5	884.5
110°	118.2	156.0	469.5	886.5	942.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.1	874.0	958.5
115°	149.8	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.4	210.1	391.0	731.3	860.6
122.5°	190.7	220.4	385.4	690.8	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.3	596.6	694.8
130°	228.3	255.8	372.3	571.0	659.2
132.5°	236.8	264.3	370.4	549.3	627.3
135°	248.3	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.2	492.3	548.2
140°	268.1	292.1	365.3	475.3	525.8
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.8	307.4	363.0	441.0	474.3
147.5°	299.5	317.2	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.4
157.5°	333.9	342.9	360.6	389.0	397.6
160°	339.5	347.6	360.6	384.2	391.0
162.5°	345.2	351.4	361.6	380.4	385.4
165°	351.3	355.8	361.8	377.0	378.2
167.5°	357.6	359.8	363.0	373.1	374.0
170°	359.4	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.2	365.3	363.0	367.6	366.5
177.5°	365.0	365.0	362.3	366.0	364.2
180°	364.2	364.2	364.2	364.2	364.2

(END OF REPORT)