

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: P519976

Luminaire Tested: **SQ4-F-050U-125D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519976  
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-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

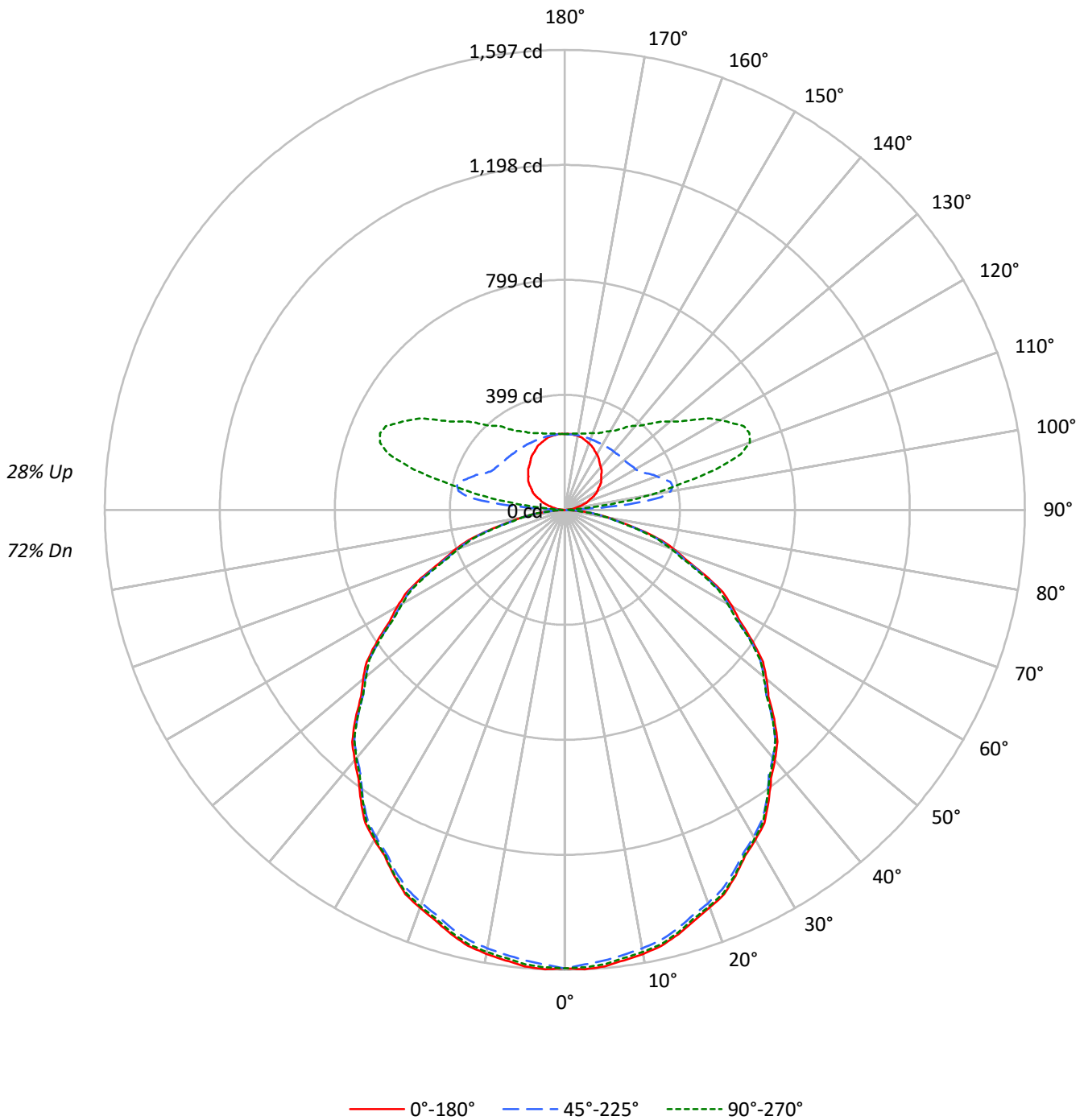
Lumens per Lamp: N/A  
Luminaire Lumens: 6066.5 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 55.9  
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°	14688	14688	14688
5°	14736	14550	14671
10°	14668	14487	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14120	14236
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13409	13262	13284
50°	13118	12965	12928
55°	12783	12598	12571
60°	12367	12092	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9496	9211
80°	7917	7678	7635
85°	4732	5378	5378



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.2	2.5
10°-20°	427.8	7.1
20°-30°	642.7	10.6
30°-40°	766.9	12.6
40°-50°	786.1	13.0
50°-60°	700.7	11.5
60°-70°	521.6	8.6
70°-80°	282.6	4.7
80°-90°	65.9	1.1
90°-100°	126.6	2.1
100°-110°	343.9	5.7
110°-120°	353.6	5.8
120°-130°	282.7	4.7
130°-140°	222.1	3.7
140°-150°	170.3	2.8
150°-160°	122.5	2.0
160°-170°	74.9	1.2
170°-180°	25.2	0.4
0°-30°	1220.7	20.1
0°-40°	1987.6	32.8
0°-60°	3474.4	57.3
0°-90°	4344.5	71.6
90°-120°	824.2	13.6
90°-150°	1499.4	24.7
90°-180°	1722.0	28.4
0°-180°	6066.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1591	1589	1571	1585	1584	151
15°	1525	1522	1507	1520	1519	430
25°	1402	1399	1387	1395	1398	646
35°	1234	1233	1223	1223	1224	771
45°	1028	1025	1016	1015	1018	792
55°	795	792	783	777	782	710
65°	537	534	526	522	519	532
75°	272	272	266	261	258	289
85°	45	51	51	52	51	62
90°	1	3	6	8	8	2
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	344	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

TEST NUMBER: P519976

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1592.0	1592.0	1592.0	1592.0	1592.0
2.5°	1596.9	1594.2	1580.1	1591.9	1589.9
5°	1591.1	1588.6	1571.0	1584.9	1584.1
7.5°	1577.6	1574.4	1558.4	1571.5	1569.9
10°	1565.7	1563.1	1546.4	1559.6	1558.7
12.5°	1551.0	1548.5	1531.7	1544.8	1544.7
15°	1525.4	1522.0	1507.0	1520.2	1519.3
17.5°	1494.7	1490.8	1476.0	1486.3	1488.0
20°	1470.2	1467.7	1453.6	1463.2	1464.9
22.5°	1445.0	1441.7	1426.9	1438.0	1439.7
25°	1401.9	1399.3	1387.0	1394.9	1398.4
27.5°	1354.6	1354.6	1343.1	1348.8	1350.9
30°	1323.0	1323.0	1311.6	1315.2	1318.6
32.5°	1289.4	1286.7	1275.9	1278.8	1282.2
35°	1233.7	1232.7	1223.1	1223.1	1224.0
37.5°	1176.0	1173.6	1163.0	1163.8	1168.0
40°	1134.6	1132.9	1122.4	1122.5	1125.9
42.5°	1092.6	1090.8	1081.7	1080.3	1081.7
45°	1027.7	1025.2	1016.4	1014.6	1018.1
47.5°	958.7	959.4	948.9	946.5	948.3
50°	913.9	913.9	903.3	898.1	900.7
52.5°	866.9	865.5	855.0	849.1	855.1
55°	794.7	792.1	783.2	777.3	781.5
57.5°	720.7	716.8	707.9	701.4	703.8
60°	670.2	664.3	655.3	650.2	651.9
62.5°	617.7	614.4	604.9	597.0	600.7
65°	537.1	533.6	525.7	522.2	518.7
67.5°	458.1	455.9	446.9	443.1	440.9
70°	404.8	400.5	394.3	389.9	389.0
72.5°	352.9	347.9	341.7	338.0	335.8
75°	272.5	272.5	266.4	261.1	258.4
77.5°	195.9	196.6	191.6	189.7	188.5
80°	149.0	149.0	144.5	142.8	143.7
82.5°	104.1	106.1	104.6	102.2	100.9
85°	44.7	50.7	50.8	51.7	50.8
87.5°	7.9	13.2	14.5	13.5	12.1
90°	0.9	3.3	5.9	7.7	7.7
92.5°	7.7	34.6	60.3	25.9	21.9
95°	18.6	69.3	220.5	96.0	64.5
97.5°	30.9	76.4	338.1	263.0	184.7
100°	39.1	81.3	374.0	379.1	306.2
102.5°	47.1	86.2	383.5	468.9	404.5
105°	61.0	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.2	640.6
110°	85.7	113.0	340.0	642.1	682.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.7	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.4	558.7	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.7	279.2	500.4	590.7
125°	149.3	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.3	185.3	269.7	413.6	477.4
132.5°	171.4	191.4	268.3	397.8	454.3
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.9	265.2	356.6	397.0
140°	194.2	211.6	264.6	344.2	380.7
142.5°	199.6	215.7	263.9	334.6	365.1
145°	207.7	222.7	262.9	319.4	343.5
147.5°	217.0	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.6	315.5
152.5°	227.8	237.3	261.3	294.4	306.7
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.4	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.4	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.1	270.8
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.8	264.6	262.9	266.2	265.4
177.5°	264.5	264.5	262.4	265.0	263.8
180°	263.8	263.8	263.8	263.8	263.8

(END OF REPORT)