

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: P519928

Luminaire Tested: **SQ4-F-050U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519928
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-940-1D-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

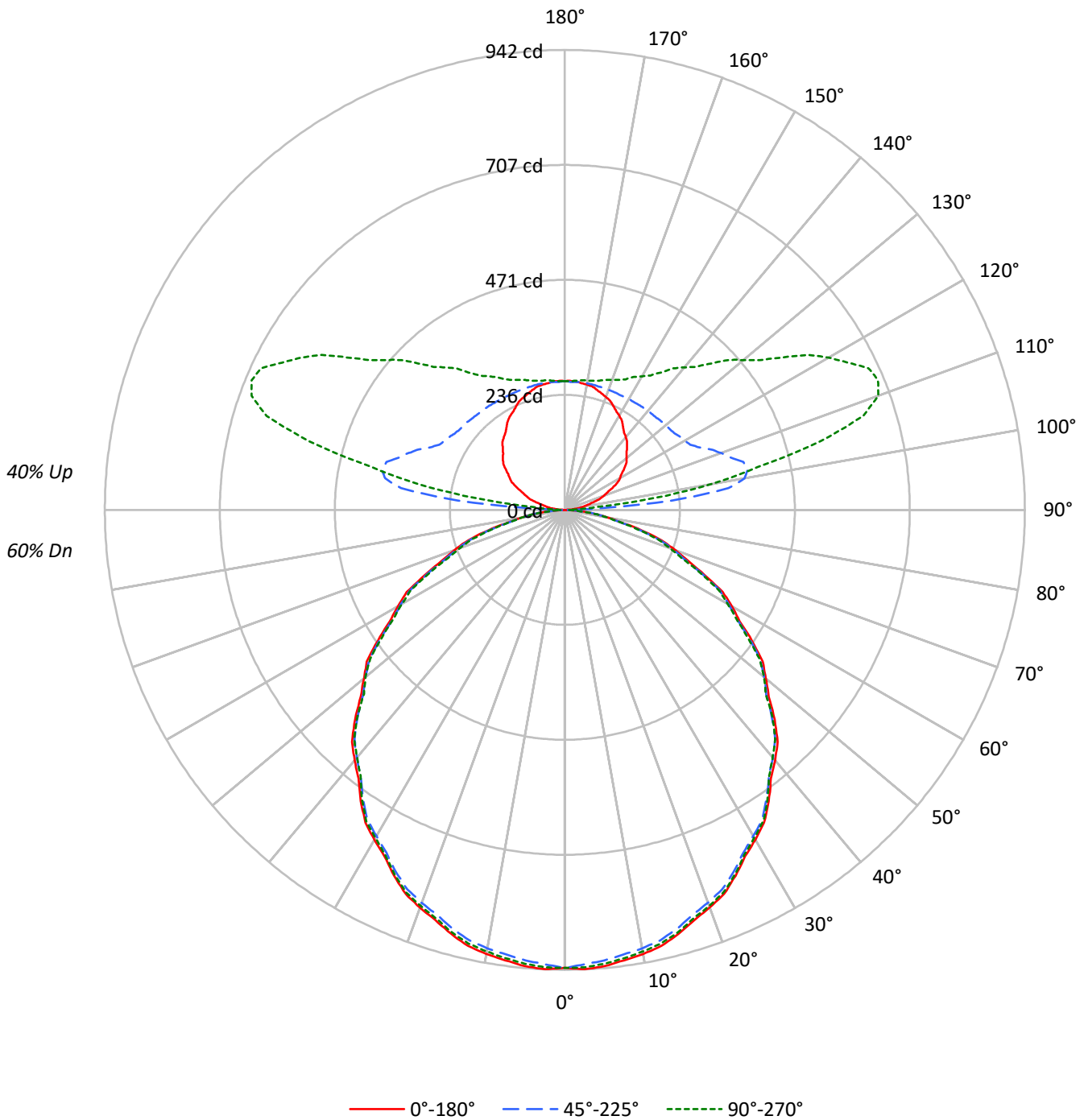
Lumens per Lamp: N/A
Luminaire Lumens: 4284.6 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8543	8607
15°	8589	8483	8556
20°	8512	8410	8477
25°	8418	8330	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7972
45°	7925	7826	7848
50°	7705	7645	7645
55°	7526	7430	7362
60°	7283	7158	7095
65°	6890	6761	6667
70°	6471	6310	6150
75°	5825	5611	5490
80°	4654	4564	4516
85°	2795	3155	3239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	2.1
10°-20°	252.1	5.9
20°-30°	378.8	8.8
30°-40°	452.0	10.5
40°-50°	463.6	10.8
50°-60°	413.1	9.6
60°-70°	308.0	7.2
70°-80°	167.0	3.9
80°-90°	39.4	0.9
90°-100°	126.6	3.0
100°-110°	343.9	8.0
110°-120°	353.6	8.3
120°-130°	282.7	6.6
130°-140°	222.1	5.2
140°-150°	170.3	4.0
150°-160°	122.5	2.9
160°-170°	74.9	1.7
170°-180°	25.2	0.6
0°-30°	719.5	16.8
0°-40°	1171.5	27.3
0°-60°	2048.2	47.8
0°-90°	2562.6	59.8
90°-120°	824.2	19.2
90°-150°	1499.4	35.0
90°-180°	1722.0	40.2
0°-180°	4284.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	938	938	938	938	938	
5°	938	937	926	934	933	89
15°	899	898	888	895	896	254
25°	827	826	818	823	824	381
35°	728	726	720	721	724	455
45°	607	605	600	600	602	467
55°	468	467	462	458	458	418
65°	316	316	310	306	305	314
75°	163	160	157	155	154	172
85°	26	28	30	30	31	37
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	938.3	938.3	938.3	938.3	938.3
2.5°	941.7	939.8	931.5	938.3	937.6
5°	938.3	936.6	926.4	934.1	933.2
7.5°	930.6	928.9	918.7	926.4	926.2
10°	923.8	921.4	911.9	919.6	918.7
12.5°	915.0	912.5	903.1	910.7	909.9
15°	899.2	897.6	888.1	895.0	895.8
17.5°	881.1	878.0	869.6	876.2	877.1
20°	866.9	864.4	856.6	862.6	863.4
22.5°	851.9	849.4	841.7	847.7	848.5
25°	826.9	826.0	818.3	822.7	824.3
27.5°	799.8	797.5	791.3	794.6	796.3
30°	780.1	778.4	771.6	774.2	775.8
32.5°	759.7	758.7	752.5	753.8	756.2
35°	728.2	726.5	720.5	720.6	724.0
37.5°	693.4	691.5	686.5	685.7	687.1
40°	669.5	667.0	662.7	661.9	661.9
42.5°	645.1	643.2	637.5	636.0	638.1
45°	607.4	604.9	599.8	599.8	601.5
47.5°	566.7	565.7	559.7	557.1	557.8
50°	536.8	538.5	532.6	529.2	532.6
52.5°	510.9	509.9	504.6	501.3	502.6
55°	467.9	467.0	461.9	457.7	457.7
57.5°	424.6	422.6	417.1	414.0	416.6
60°	394.7	393.9	387.9	382.0	384.5
62.5°	364.8	363.3	357.3	353.4	355.2
65°	315.6	315.6	309.7	306.2	305.4
67.5°	272.6	268.6	265.2	261.2	260.0
70°	239.9	236.6	233.9	230.5	228.0
72.5°	207.9	206.0	201.9	198.6	198.1
75°	163.4	160.0	157.4	154.8	154.0
77.5°	116.2	115.5	113.2	111.8	112.3
80°	87.6	87.6	85.9	85.9	85.0
82.5°	61.8	62.4	62.1	60.7	60.6
85°	26.4	28.0	29.8	29.8	30.6
87.5°	4.9	8.8	8.7	9.1	9.1
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)