

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: P519088

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519088
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

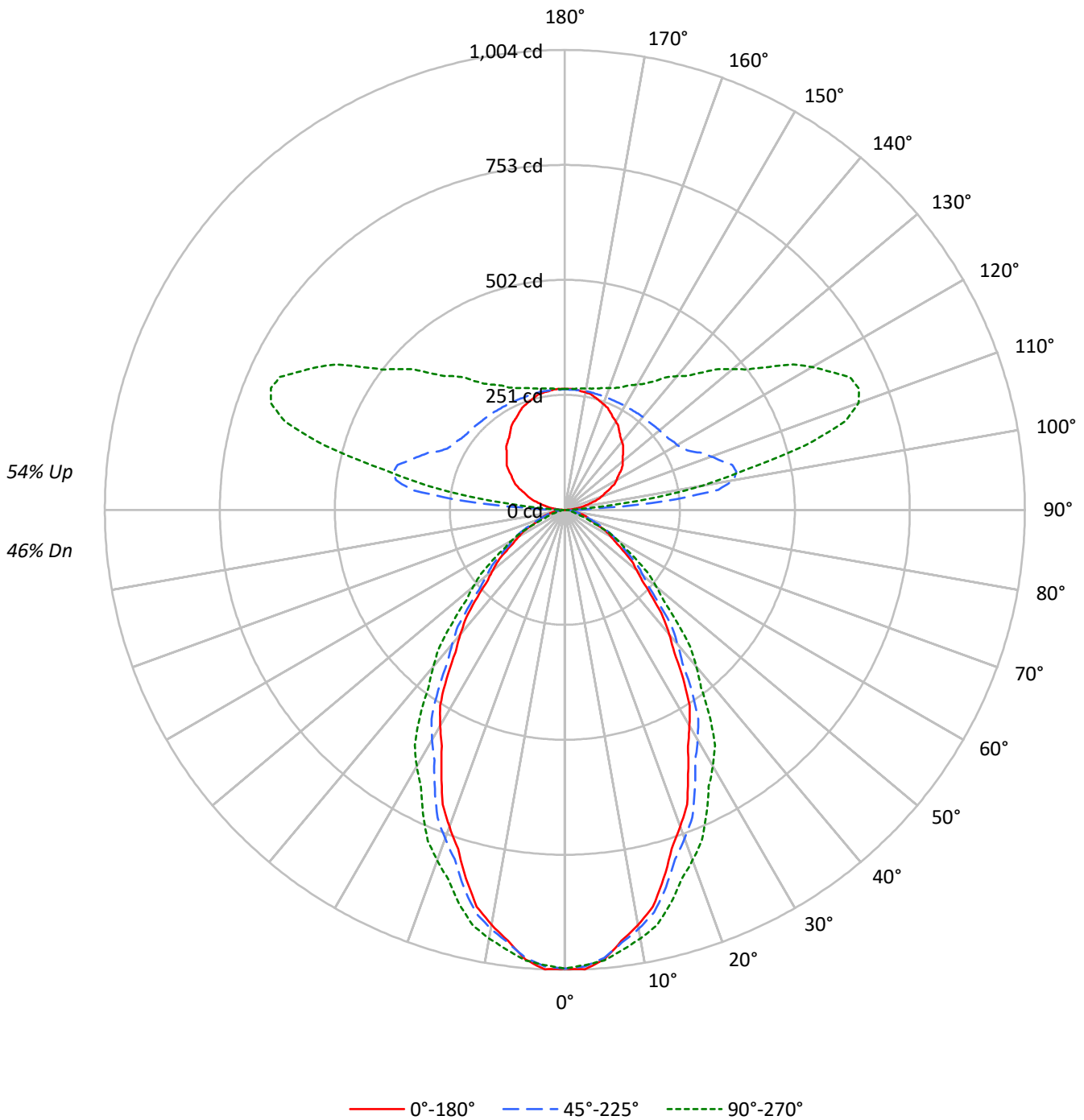
Lumens per Lamp: N/A
Luminaire Lumens: 3182.5 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9241	9241	9241
5°	9125	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7227	7499	7996
25°	6483	6836	7449
30°	5797	6176	6882
35°	5068	5436	6213
40°	4266	4606	5378
45°	3520	3824	4490
50°	2940	3205	3741
55°	2495	2751	3090
60°	2133	2384	2465
65°	1698	2006	1594
70°	1505	1565	971
75°	1394	1269	595
80°	1286	1169	515
85°	1164	1069	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	2.9
10°-20°	239.0	7.5
20°-30°	309.5	9.7
30°-40°	303.1	9.5
40°-50°	232.0	7.3
50°-60°	154.6	4.9
60°-70°	84.4	2.7
70°-80°	35.1	1.1
80°-90°	11.0	0.3
90°-100°	126.6	4.0
100°-110°	343.9	10.8
110°-120°	353.6	11.1
120°-130°	282.7	8.9
130°-140°	222.2	7.0
140°-150°	170.3	5.4
150°-160°	122.5	3.8
160°-170°	74.9	2.4
170°-180°	25.2	0.8
0°-30°	640.3	20.1
0°-40°	943.4	29.6
0°-60°	1330.0	41.8
0°-90°	1460.5	45.9
90°-120°	824.1	25.9
90°-150°	1499.3	47.1
90°-180°	1722.0	54.1
0°-180°	3182.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1002	1002	1002	1002	1002	
5°	985	975	982	984	988	92
15°	833	830	853	876	891	233
25°	637	638	672	701	732	293
35°	450	452	483	515	552	280
45°	270	275	293	315	344	210
55°	155	162	171	177	192	141
65°	78	84	92	80	73	81
75°	39	39	36	24	17	42
85°	11	11	10	6	4	12
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	343	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: P519088

CATALOG NUMBER: SQ4-WB-050U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.6	1001.6	1001.6	1001.6	1001.6
2.5°	1004.1	995.1	997.4	997.3	994.6
5°	985.3	975.4	981.8	984.1	987.5
7.5°	948.8	941.3	952.9	961.5	968.5
10°	920.3	913.8	928.6	941.1	950.2
12.5°	887.2	881.8	900.2	917.0	928.7
15°	833.3	830.3	852.6	875.8	890.8
17.5°	775.5	774.1	799.7	826.8	846.0
20°	736.1	735.7	763.8	792.0	814.4
22.5°	696.4	697.4	726.9	756.2	781.7
25°	636.8	638.5	671.5	700.8	731.7
27.5°	581.7	582.5	616.6	647.5	680.5
30°	544.1	546.2	579.7	611.7	646.0
32.5°	506.5	509.0	541.7	574.8	609.8
35°	450.0	452.2	482.6	515.0	551.6
37.5°	391.8	394.8	421.7	452.4	488.4
40°	354.2	358.5	382.4	411.3	446.5
42.5°	318.0	323.3	345.4	372.9	404.7
45°	269.8	275.0	293.1	315.3	344.1
47.5°	228.4	234.3	248.2	267.3	291.9
50°	204.8	210.4	223.3	237.4	260.6
52.5°	184.1	189.6	201.1	212.0	231.8
55°	155.1	161.6	171.0	177.4	192.1
57.5°	131.4	137.6	145.0	148.0	156.8
60°	115.6	122.5	129.2	128.9	133.6
62.5°	101.2	107.0	113.7	109.1	109.3
65°	77.8	84.2	91.9	80.3	73.0
67.5°	62.8	64.2	72.1	56.0	47.3
70°	55.8	55.8	58.0	43.3	36.0
72.5°	49.1	49.1	47.1	35.2	27.6
75°	39.1	39.1	35.6	24.4	16.7
77.5°	30.1	29.8	27.2	18.2	12.1
80°	24.2	24.2	22.0	14.4	9.7
82.5°	18.9	18.9	17.1	11.2	7.2
85°	11.0	11.0	10.1	6.5	4.0
87.5°	4.0	4.5	4.7	3.6	3.3
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6

TEST NUMBER: P519088

CATALOG NUMBER: SQ4-WB-050U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	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	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)