

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521766

Luminaire Tested: **SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521766
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

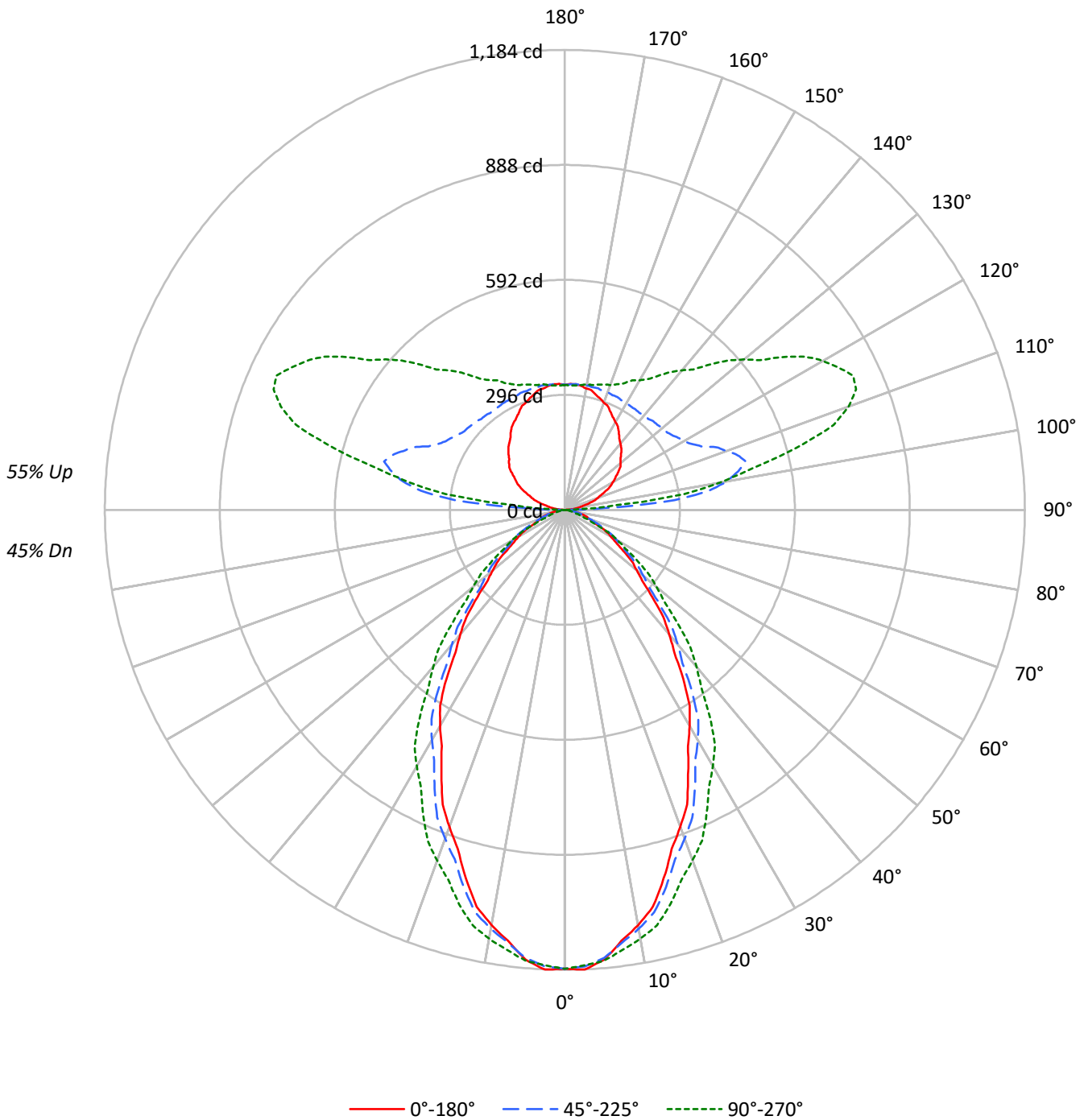
Lumens per Lamp: N/A
Luminaire Lumens: 3805.2 lumens
Efficiency: N/A
Efficacy: 103.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.9
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46	40
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	33	32	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	28	25	23
7	61	49	42	37	56	46	39	35	39	34	31	33	30	27	28	25	23	21
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	29	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10902	10902	10902
5°	10766	10728	10790
10°	10171	10263	10502
15°	9389	9608	10039
20°	8527	8847	9432
25°	7648	8065	8788
30°	6838	7286	8120
35°	5980	6412	7329
40°	5033	5433	6345
45°	4153	4512	5297
50°	3468	3781	4414
55°	2944	3244	3645
60°	2517	2812	2908
65°	2004	2366	1880
70°	1775	1845	1146
75°	1643	1497	702
80°	1514	1376	606
85°	1376	1260	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	2.8
10°-20°	281.9	7.4
20°-30°	365.2	9.6
30°-40°	357.6	9.4
40°-50°	273.7	7.2
50°-60°	182.4	4.8
60°-70°	99.5	2.6
70°-80°	41.5	1.1
80°-90°	11.7	0.3
90°-100°	165.9	4.4
100°-110°	400.9	10.5
110°-120°	427.6	11.2
120°-130°	346.3	9.1
130°-140°	268.1	7.0
140°-150°	204.5	5.4
150°-160°	148.0	3.9
160°-170°	91.2	2.4
170°-180°	30.9	0.8
0°-30°	755.4	19.9
0°-40°	1113.0	29.3
0°-60°	1569.1	41.2
0°-90°	1721.8	45.2
90°-120°	994.3	26.1
90°-150°	1813.2	47.7
90°-180°	2083.0	54.7
0°-180°	3805.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1162	1151	1158	1161	1165	108
15°	983	980	1006	1033	1051	275
25°	751	753	792	827	863	346
35°	531	534	569	608	651	330
45°	318	324	346	372	406	248
55°	183	191	202	209	227	166
65°	92	99	108	95	86	95
75°	46	46	42	29	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	



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CATALOG NUMBER: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1184.5	1174.0	1176.6	1176.6	1173.3
5°	1162.4	1150.8	1158.3	1161.0	1165.0
7.5°	1119.3	1110.5	1124.2	1134.3	1142.5
10°	1085.7	1078.1	1095.5	1110.3	1121.0
12.5°	1046.7	1040.3	1062.0	1081.8	1095.7
15°	983.0	979.5	1005.9	1033.2	1051.0
17.5°	914.9	913.2	943.4	975.4	998.1
20°	868.5	867.9	901.1	934.4	960.7
22.5°	821.6	822.7	857.6	892.2	922.2
25°	751.3	753.3	792.2	826.8	863.3
27.5°	686.3	687.2	727.4	763.9	802.8
30°	641.9	644.4	683.9	721.6	762.2
32.5°	597.5	600.4	639.1	678.1	719.4
35°	530.9	533.5	569.3	607.6	650.7
37.5°	462.3	465.7	497.5	533.8	576.1
40°	417.9	423.0	451.1	485.2	526.8
42.5°	375.2	381.5	407.5	439.9	477.4
45°	318.3	324.4	345.8	372.0	406.0
47.5°	269.4	276.4	292.8	315.4	344.4
50°	241.6	248.2	263.4	280.1	307.5
52.5°	217.1	223.7	237.3	250.1	273.4
55°	183.0	190.6	201.7	209.3	226.6
57.5°	155.0	162.3	171.1	174.6	185.0
60°	136.4	144.5	152.4	152.0	157.6
62.5°	119.4	126.2	134.2	128.7	129.0
65°	91.8	99.4	108.4	94.7	86.1
67.5°	74.1	75.8	85.0	66.0	55.8
70°	65.8	65.8	68.4	51.1	42.5
72.5°	58.0	58.0	55.6	41.6	32.6
75°	46.1	46.1	42.0	28.8	19.7
77.5°	35.6	35.2	32.1	21.5	14.3
80°	28.5	28.5	25.9	17.0	11.4
82.5°	22.3	22.3	20.1	13.3	8.5
85°	13.0	13.0	11.9	7.7	4.7
87.5°	4.6	4.6	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)