

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: P518303

Luminaire Tested: **SQ4-BB-025U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518303
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

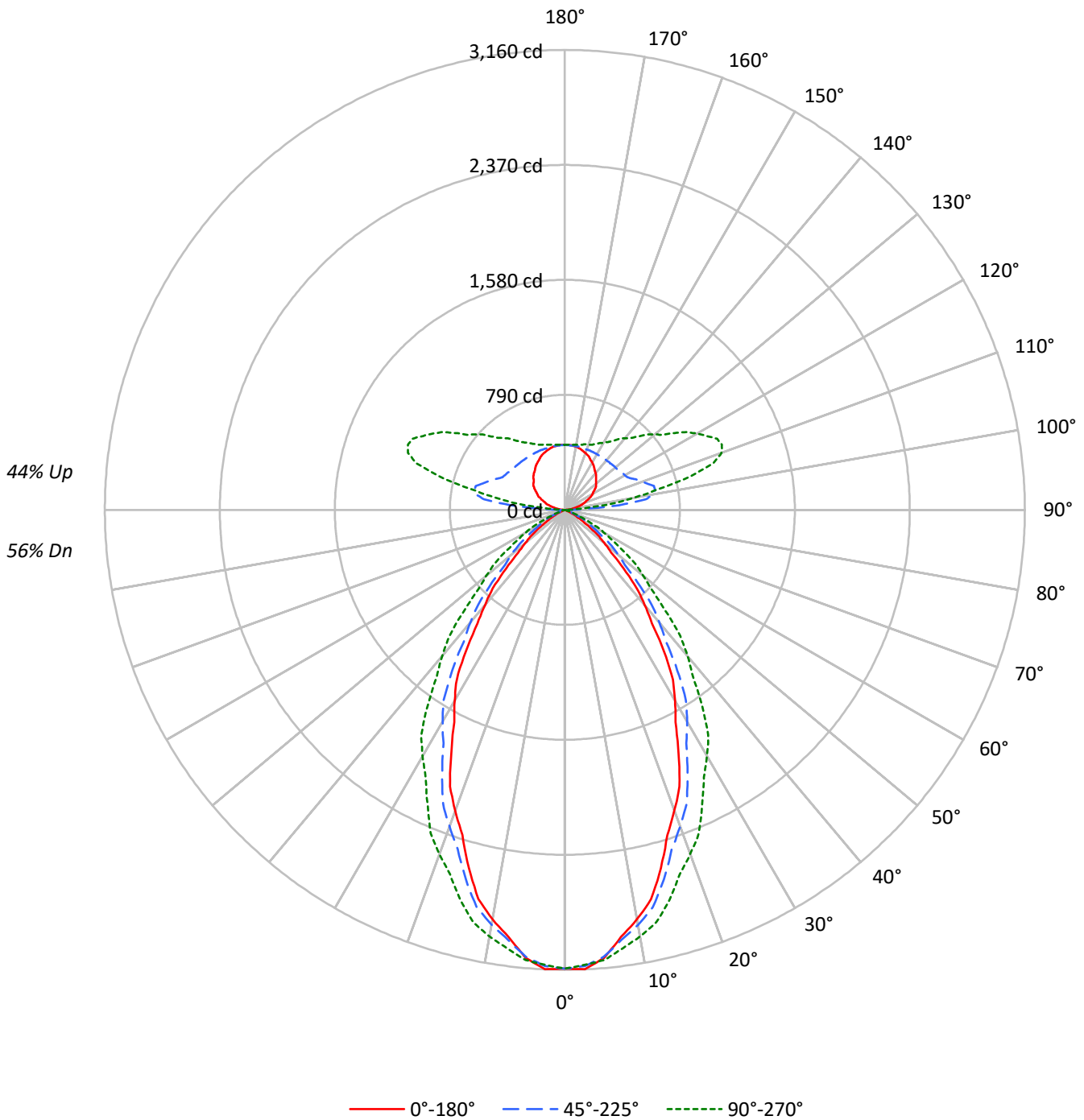
Lumens per Lamp: N/A
Luminaire Lumens: 6660.5 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 68.8
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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56																			
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52																			
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47																			
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42																			
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38																			
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35																			
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32																			
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29																			
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27																			
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																			
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9585
10°	8925	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6937
35°	4455	5061	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1686	2284	3356
55°	1096	1652	2609
60°	629	1163	1885
65°	167	710	955
70°	83	219	274
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.7	4.3
10°-20°	735.7	11.0
20°-30°	921.0	13.8
30°-40°	850.7	12.8
40°-50°	571.6	8.6
50°-60°	295.2	4.4
60°-70°	92.5	1.4
70°-80°	5.8	0.1
80°-90°	2.5	0.0
90°-100°	217.9	3.3
100°-110°	572.8	8.6
110°-120°	594.0	8.9
120°-130°	476.5	7.2
130°-140°	373.8	5.6
140°-150°	286.9	4.3
150°-160°	206.7	3.1
160°-170°	126.4	1.9
170°-180°	42.7	0.6
0°-30°	1944.3	29.2
0°-40°	2795.0	42.0
0°-60°	3661.9	55.0
0°-90°	3762.7	56.5
90°-120°	1384.7	20.8
90°-150°	2521.9	37.9
90°-180°	2898.0	43.5
0°-180°	6660.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3152	3152	3152	3152	3152	
5°	3090	3058	3082	3093	3105	286
15°	2548	2539	2629	2717	2776	710
25°	1848	1863	1995	2131	2231	847
35°	1186	1216	1348	1507	1644	735
45°	569	603	705	842	973	447
55°	204	239	308	396	486	191
65°	23	44	98	118	131	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	3	8	23	12	12	3
95°	29	113	375	194	132	32
105°	103	156	633	962	897	109
115°	183	223	507	1012	1155	181
125°	255	286	461	780	920	226
135°	304	335	447	630	714	235
145°	352	375	441	537	579	221
155°	398	410	441	485	499	183
165°	430	436	441	459	464	121
175°	447	447	444	450	450	42
180°	447	447	447	447	447	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3152.2	3152.2	3152.2	3152.2	3152.2
2.5°	3159.5	3129.7	3137.6	3137.4	3129.0
5°	3089.7	3058.4	3082.1	3093.0	3104.9
7.5°	2959.1	2934.7	2980.2	3014.3	3039.1
10°	2857.9	2837.0	2896.0	2942.5	2976.8
12.5°	2740.8	2724.7	2796.0	2859.8	2903.6
15°	2548.3	2539.4	2629.1	2717.4	2775.5
17.5°	2342.1	2341.8	2444.3	2553.9	2623.9
20°	2200.6	2205.1	2315.0	2435.8	2517.8
22.5°	2059.1	2069.5	2186.9	2312.8	2406.8
25°	1848.3	1863.2	1994.7	2131.2	2231.1
27.5°	1645.8	1667.6	1805.9	1947.8	2069.4
30°	1512.8	1538.2	1679.0	1828.3	1953.5
32.5°	1382.3	1412.4	1549.7	1707.6	1835.2
35°	1186.5	1216.3	1348.1	1506.8	1644.0
37.5°	984.2	1013.5	1142.2	1298.4	1446.6
40°	852.5	885.3	1008.0	1159.4	1310.0
42.5°	732.9	765.7	881.2	1029.9	1172.1
45°	568.8	603.1	704.6	841.7	973.0
47.5°	432.8	470.1	559.1	683.2	802.8
50°	352.3	389.6	477.3	586.7	701.5
52.5°	287.6	323.7	402.9	506.0	611.2
55°	204.4	238.6	308.1	395.5	486.5
57.5°	141.2	170.7	233.0	306.0	377.3
60°	102.2	130.5	189.1	248.4	306.5
62.5°	68.0	94.0	151.3	196.7	235.8
65°	22.9	43.8	97.6	117.7	131.2
67.5°	11.6	14.0	51.2	54.1	58.6
70°	9.2	9.2	24.4	26.0	30.5
72.5°	6.7	6.7	9.8	12.5	13.4
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	4.6	2.3	2.3
90°	2.9	8.5	22.9	11.5	11.5
92.5°	12.0	58.0	128.4	56.9	36.7
95°	28.7	112.7	375.4	193.5	131.8
97.5°	49.9	123.8	561.7	446.7	329.0
100°	65.9	133.2	619.0	627.3	487.2
102.5°	79.7	142.4	635.1	781.4	661.4
105°	103.2	156.4	633.4	961.5	897.0
107.5°	127.2	176.6	597.2	1055.0	1070.7
110°	143.3	188.1	567.4	1079.1	1146.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	159.3	201.9	539.9	1063.9	1167.0
115°	183.4	222.6	507.3	1012.0	1154.9
117.5°	206.9	242.8	484.9	940.2	1098.8
120°	220.7	254.3	475.7	891.9	1046.0
122.5°	234.4	268.1	468.9	843.7	995.6
125°	255.1	285.9	461.4	779.8	919.9
127.5°	271.7	303.1	455.1	728.3	846.6
130°	280.9	314.5	452.8	696.0	805.3
132.5°	290.0	323.7	450.5	668.3	766.3
135°	303.8	334.6	447.1	629.5	713.6
137.5°	318.1	348.4	446.5	600.5	669.5
140°	329.6	357.6	444.2	577.5	642.0
142.5°	338.7	364.5	444.2	561.3	616.7
145°	352.5	374.9	441.3	536.9	578.9
147.5°	366.3	388.1	441.3	516.6	551.4
150°	375.4	395.0	441.3	505.0	533.1
152.5°	384.6	399.7	441.3	495.7	517.0
155°	398.4	409.6	441.3	484.6	498.7
157.5°	408.7	419.3	441.3	474.8	484.9
160°	415.5	424.0	441.3	470.1	475.7
162.5°	422.4	428.6	441.3	465.5	471.1
165°	429.9	435.5	441.3	458.7	464.3
167.5°	436.8	439.6	444.2	455.7	458.0
170°	441.3	444.1	444.2	455.7	455.7
172.5°	443.6	444.2	444.2	453.3	451.1
175°	447.1	447.1	444.2	449.9	449.9
177.5°	447.1	447.1	444.8	449.3	447.1
180°	447.1	447.1	447.1	447.1	447.1

(END OF REPORT)