

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: P518481

Luminaire Tested: **SQ4-BB-050U-125D-930-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518481
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-930-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

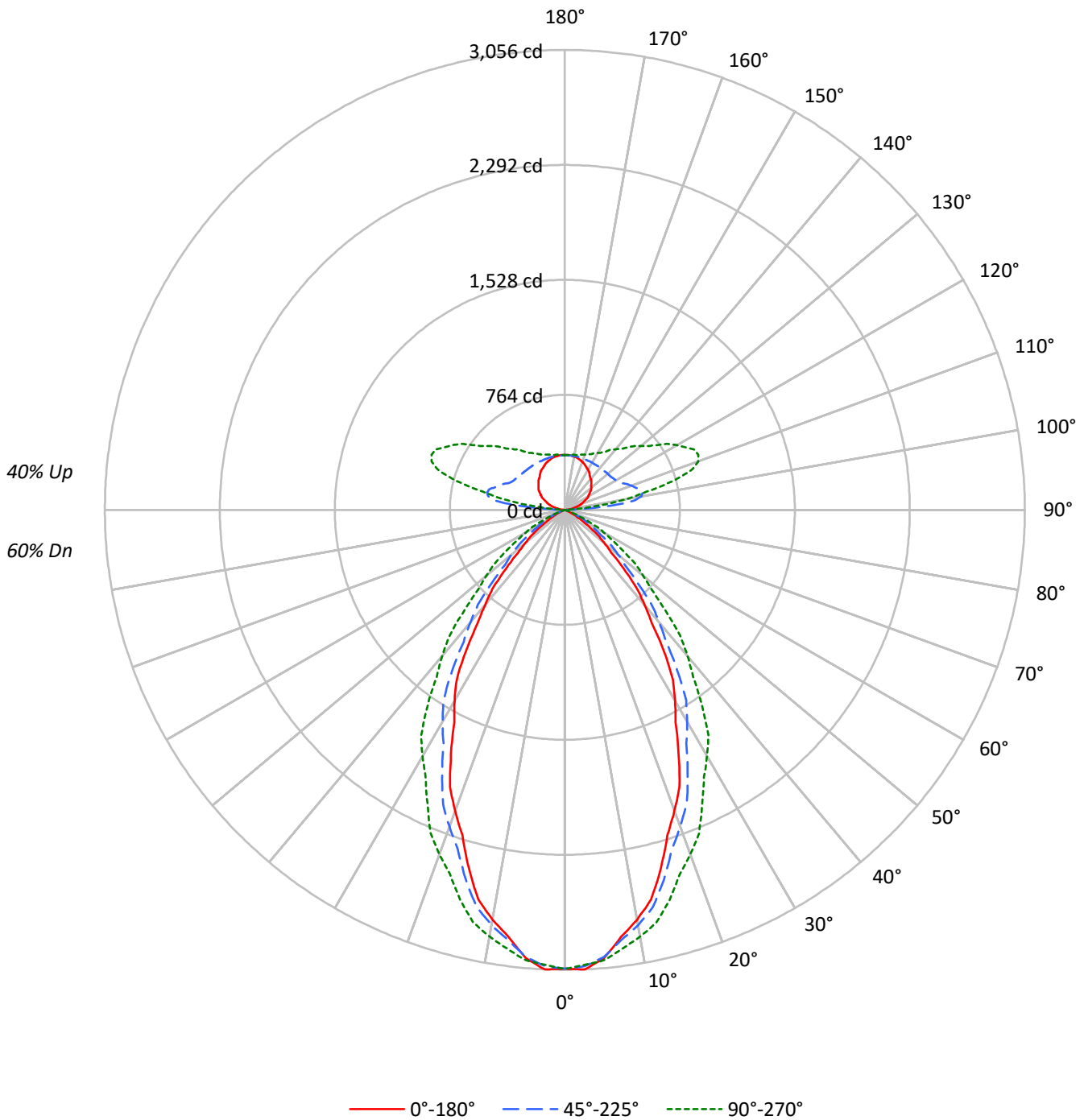
Lumens per Lamp: N/A
Luminaire Lumens: 6016.8 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 87.8
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					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60		
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55		
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50		
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45		
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41		
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37		
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34		
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31		
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29		
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26		
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18757	18757	18757
5°	18455	18409	18546
10°	17267	17498	17986
15°	15698	16196	17098
20°	13935	14659	15943
25°	12135	13096	14648
30°	10394	11536	13423
35°	8619	9793	11942
40°	6622	7830	10176
45°	4787	5929	8187
50°	3261	4419	6493
55°	2120	3196	5047
60°	1215	2250	3647
65°	322	1374	1847
70°	160	424	531
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.3	4.6
10°-20°	711.7	11.8
20°-30°	891.0	14.8
30°-40°	823.0	13.7
40°-50°	553.0	9.2
50°-60°	285.6	4.7
60°-70°	89.5	1.5
70°-80°	5.7	0.1
80°-90°	1.5	0.0
90°-100°	174.8	2.9
100°-110°	474.9	7.9
110°-120°	488.2	8.1
120°-130°	390.4	6.5
130°-140°	306.7	5.1
140°-150°	235.2	3.9
150°-160°	169.1	2.8
160°-170°	103.4	1.7
170°-180°	34.8	0.6
0°-30°	1881.0	31.3
0°-40°	2703.9	44.9
0°-60°	3542.5	58.9
0°-90°	3639.2	60.5
90°-120°	1137.9	18.9
90°-150°	2070.2	34.4
90°-180°	2378.0	39.5
0°-180°	6016.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3050	3050	3050	3050	3050	
5°	2989	2959	2982	2992	3004	277
15°	2465	2457	2543	2629	2685	687
25°	1788	1802	1930	2062	2158	820
35°	1148	1177	1304	1458	1590	711
45°	550	584	682	814	941	432
55°	198	231	298	383	471	184
65°	22	42	94	114	127	37
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	1	5	8	10	10	2
95°	26	96	304	132	89	27
105°	84	131	522	795	748	90
115°	150	182	418	832	947	148
125°	206	235	378	637	752	184
135°	248	276	368	519	585	192
145°	287	308	363	441	474	180
155°	324	336	361	396	408	150
165°	351	356	362	377	378	99
175°	364	365	363	368	366	35
180°	364	364	364	364	364	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3049.5	3049.5	3049.5	3049.5	3049.5
2.5°	3056.5	3027.7	3035.3	3035.1	3027.0
5°	2989.0	2958.7	2981.6	2992.2	3003.7
7.5°	2862.7	2839.0	2883.0	2916.0	2940.0
10°	2764.7	2744.5	2801.6	2846.6	2879.8
12.5°	2651.4	2635.8	2704.8	2766.6	2809.0
15°	2465.2	2456.6	2543.4	2628.8	2685.1
17.5°	2265.8	2265.5	2364.6	2470.6	2538.4
20°	2128.9	2133.2	2239.5	2356.4	2435.7
22.5°	1992.0	2002.1	2115.6	2237.4	2328.3
25°	1788.1	1802.5	1929.7	2061.7	2158.4
27.5°	1592.1	1613.2	1747.1	1884.3	2002.0
30°	1463.5	1488.0	1624.3	1768.7	1889.9
32.5°	1337.2	1366.4	1499.2	1651.9	1775.4
35°	1147.8	1176.6	1304.2	1457.7	1590.4
37.5°	952.2	980.4	1105.0	1256.1	1399.5
40°	824.7	856.4	975.2	1121.6	1267.3
42.5°	709.0	740.8	852.4	996.3	1133.9
45°	550.3	583.5	681.6	814.3	941.2
47.5°	418.7	454.8	540.8	660.9	776.6
50°	340.8	376.9	461.8	567.6	678.6
52.5°	278.2	313.2	389.8	489.5	591.3
55°	197.7	230.9	298.0	382.6	470.6
57.5°	136.6	165.2	225.4	296.0	365.0
60°	98.8	126.3	182.9	240.3	296.5
62.5°	65.8	90.9	146.4	190.3	228.1
65°	22.1	42.3	94.4	113.9	126.9
67.5°	11.2	13.5	49.6	52.3	56.7
70°	8.9	8.9	23.6	25.2	29.5
72.5°	6.5	6.5	9.4	12.1	13.0
75°	3.0	3.0	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°	0.2	0.9	1.6	2.1	2.1
90°	1.2	4.6	8.2	10.5	10.5
92.5°	10.5	47.9	83.1	35.7	30.2
95°	25.8	95.6	304.4	132.5	89.0
97.5°	42.6	105.6	466.7	363.1	255.0
100°	53.9	112.2	516.4	523.4	422.7
102.5°	65.1	118.9	529.5	647.4	558.5
105°	84.3	131.2	522.2	795.1	748.2
107.5°	104.2	145.7	492.0	871.4	884.5
110°	118.3	156.0	469.5	886.5	942.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	130.4	166.4	447.0	874.0	958.5
115°	149.9	181.9	418.0	831.6	947.2
117.5°	168.1	198.8	399.5	771.5	901.8
120°	180.3	210.1	391.1	731.2	860.6
122.5°	190.6	220.4	385.5	690.9	815.6
125°	206.1	234.7	378.2	637.2	751.7
127.5°	219.9	248.3	374.2	596.6	694.8
130°	228.3	255.8	372.3	571.1	659.2
132.5°	236.8	264.2	370.5	549.3	627.4
135°	248.2	275.7	367.7	519.0	585.4
137.5°	260.6	285.6	366.3	492.3	548.2
140°	268.1	292.2	365.3	475.4	525.7
142.5°	275.6	297.8	364.4	462.1	504.2
145°	286.9	307.5	363.0	441.0	474.2
147.5°	299.5	317.1	361.8	424.5	450.6
150°	307.9	322.8	361.8	415.0	435.6
152.5°	314.5	327.6	360.9	406.4	423.4
155°	324.3	335.8	360.6	396.0	407.5
157.5°	333.9	342.9	360.6	388.9	397.6
160°	339.6	347.6	360.6	384.2	391.1
162.5°	345.2	351.4	361.6	380.4	385.5
165°	351.3	355.8	361.8	377.1	378.2
167.5°	357.6	359.9	363.0	373.1	374.0
170°	359.5	361.8	363.0	371.2	371.2
172.5°	361.3	362.7	363.0	369.3	369.3
175°	364.1	365.3	363.0	367.6	366.5
177.5°	365.1	365.1	362.3	366.0	364.1
180°	364.1	364.1	364.1	364.1	364.1

(END OF REPORT)