

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: P518381

Luminaire Tested: **SQ4-BB-025U-125D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518381
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-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

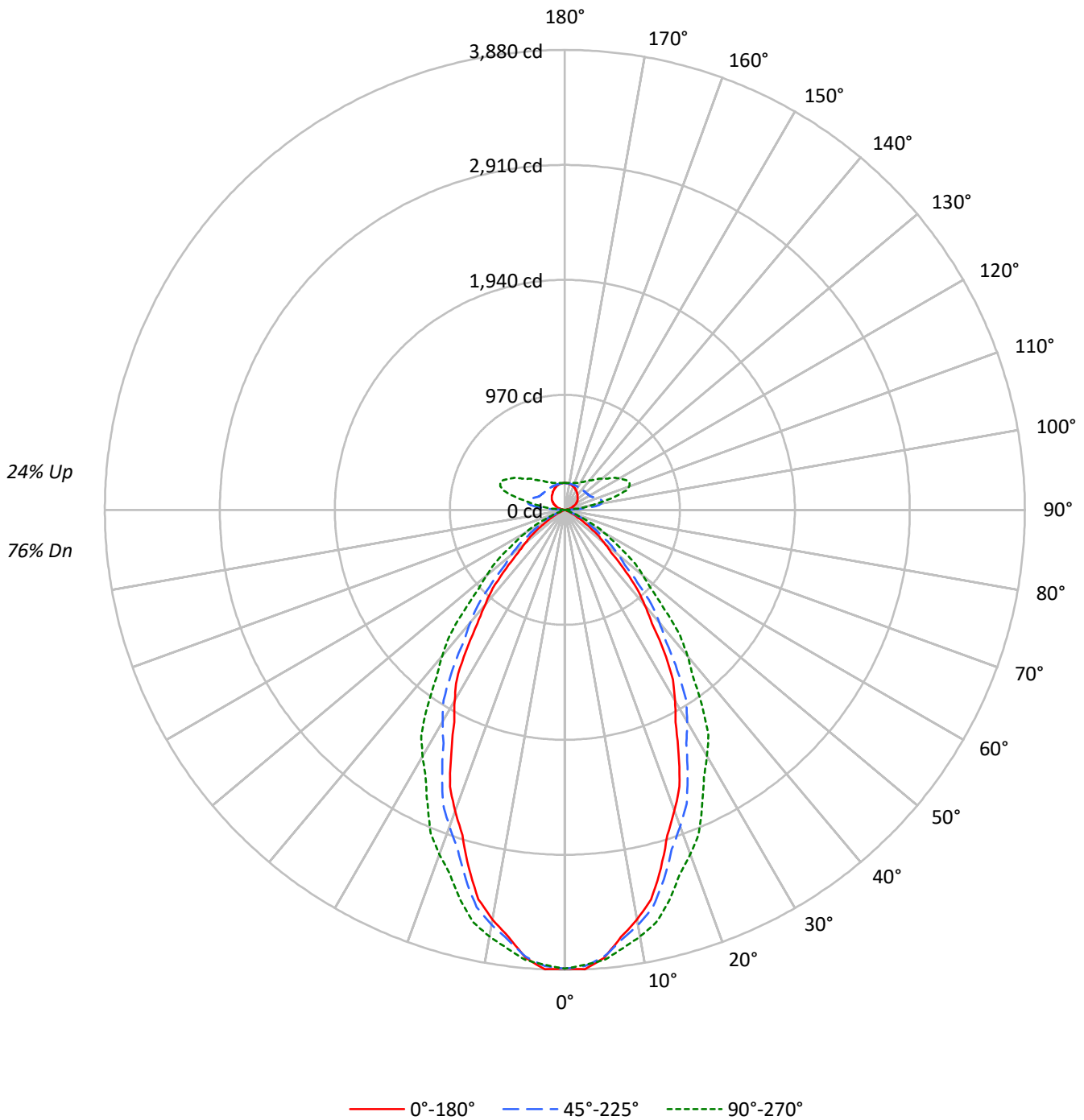
Lumens per Lamp: N/A
Luminaire Lumens: 6082.1 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 77.9
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	50	30	10	0	
RCR																						
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	80	80	80	76	
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	75	74	73	69	
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	69	67	66	63	
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	64	62	59	57	
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	59	56	54	51	
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	55	52	49	46	
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	51	47	45	42	
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	48	44	41	39	
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	44	41	38	36	
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	42	38	35	33	
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	39	35	32	31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18606	20237
25°	15403	16623	18593
30°	13193	14644	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10392
50°	4140	5608	8243
55°	2691	4057	6406
60°	1544	2856	4630
65°	409	1744	2343
70°	201	540	674
75°	88	45	0
80°	67	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.2	5.8
10°-20°	903.4	14.9
20°-30°	1130.9	18.6
30°-40°	1044.6	17.2
40°-50°	701.9	11.5
50°-60°	362.6	6.0
60°-70°	113.6	1.9
70°-80°	7.2	0.1
80°-90°	1.4	0.0
90°-100°	110.0	1.8
100°-110°	289.3	4.8
110°-120°	300.0	4.9
120°-130°	240.6	4.0
130°-140°	188.8	3.1
140°-150°	144.9	2.4
150°-160°	104.4	1.7
160°-170°	63.9	1.0
170°-180°	21.6	0.4
0°-30°	2387.5	39.3
0°-40°	3432.1	56.4
0°-60°	4496.6	73.9
0°-90°	4618.7	75.9
90°-120°	699.3	11.5
90°-150°	1273.6	20.9
90°-180°	1463.0	24.1
0°-180°	6082.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3871	3871	3871	3871	3871	
5°	3794	3756	3785	3798	3813	352
15°	3129	3118	3228	3337	3408	872
25°	2270	2288	2449	2617	2740	1041
35°	1457	1494	1655	1850	2019	903
45°	698	741	865	1034	1195	549
55°	251	293	378	486	597	234
65°	28	54	120	145	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	1	4	12	6	6	1
95°	14	57	190	98	67	16
105°	52	79	320	486	453	55
115°	93	112	256	511	583	91
125°	129	144	233	394	465	114
135°	153	169	226	318	360	119
145°	178	189	223	271	292	112
155°	201	207	223	245	252	92
165°	217	220	223	232	234	61
175°	226	226	224	227	227	21
180°	226	226	226	226	226	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3870.7	3870.7	3870.7	3870.7	3870.7
2.5°	3879.7	3843.1	3852.7	3852.5	3842.3
5°	3793.9	3755.5	3784.6	3798.0	3812.7
7.5°	3633.6	3603.6	3659.5	3701.4	3731.8
10°	3509.3	3483.7	3556.1	3613.3	3655.4
12.5°	3365.5	3345.7	3433.3	3511.6	3565.5
15°	3129.2	3118.2	3228.4	3336.8	3408.2
17.5°	2876.0	2875.6	3001.4	3136.0	3222.0
20°	2702.2	2707.7	2842.6	2991.0	3091.7
22.5°	2528.4	2541.2	2685.3	2840.0	2955.4
25°	2269.6	2287.9	2449.4	2617.0	2739.7
27.5°	2020.9	2047.7	2217.6	2391.7	2541.2
30°	1857.6	1888.8	2061.8	2245.0	2398.8
32.5°	1697.3	1734.3	1903.0	2096.8	2253.5
35°	1456.9	1493.5	1655.4	1850.2	2018.7
37.5°	1208.6	1244.5	1402.6	1594.4	1776.4
40°	1046.8	1087.1	1237.8	1423.7	1608.6
42.5°	900.0	940.3	1082.0	1264.6	1439.3
45°	698.5	740.6	865.2	1033.6	1194.7
47.5°	531.5	577.2	686.5	838.9	985.7
50°	432.6	478.4	586.1	720.4	861.4
52.5°	353.2	397.5	494.7	621.3	750.5
55°	250.9	293.0	378.3	485.7	597.4
57.5°	173.4	209.7	286.1	375.8	463.3
60°	125.5	160.3	232.2	305.0	376.4
62.5°	83.5	115.4	185.8	241.5	289.5
65°	28.1	53.7	119.8	144.6	161.0
67.5°	14.2	17.2	62.9	66.4	71.9
70°	11.2	11.2	30.0	32.0	37.5
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.9	2.3	1.2	1.2
90°	1.4	4.3	11.6	5.8	5.8
92.5°	6.1	29.3	64.8	28.7	18.5
95°	14.5	56.9	189.6	97.7	66.6
97.5°	25.2	62.5	283.7	225.6	166.2
100°	33.3	67.3	312.6	316.8	246.0
102.5°	40.2	71.9	320.7	394.6	334.0
105°	52.1	79.0	319.9	485.6	453.0
107.5°	64.3	89.2	301.6	532.8	540.7
110°	72.4	95.0	286.6	545.0	578.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	80.5	102.0	272.7	537.3	589.4
115°	92.6	112.4	256.2	511.1	583.3
117.5°	104.5	122.6	244.9	474.8	554.9
120°	111.4	128.4	240.3	450.4	528.3
122.5°	118.4	135.4	236.8	426.1	502.8
125°	128.8	144.4	233.0	393.8	464.6
127.5°	137.2	153.1	229.8	367.8	427.5
130°	141.8	158.8	228.7	351.5	406.7
132.5°	146.5	163.5	227.5	337.5	387.0
135°	153.4	169.0	225.8	317.9	360.4
137.5°	160.7	175.9	225.5	303.3	338.1
140°	166.4	180.6	224.3	291.7	324.2
142.5°	171.1	184.1	224.3	283.4	311.5
145°	178.0	189.3	222.9	271.1	292.4
147.5°	185.0	196.0	222.9	260.9	278.5
150°	189.6	199.5	222.9	255.1	269.2
152.5°	194.2	201.9	222.9	250.3	261.1
155°	201.2	206.8	222.9	244.8	251.8
157.5°	206.4	211.8	222.9	239.8	244.9
160°	209.9	214.1	222.9	237.4	240.3
162.5°	213.3	216.5	222.9	235.1	237.9
165°	217.1	219.9	222.9	231.6	234.5
167.5°	220.6	222.0	224.3	230.2	231.3
170°	222.9	224.3	224.3	230.1	230.1
172.5°	224.0	224.3	224.3	228.9	227.8
175°	225.8	225.8	224.3	227.2	227.2
177.5°	225.8	225.8	224.6	226.9	225.8
180°	225.8	225.8	225.8	225.8	225.8

(END OF REPORT)