

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: P518788

Luminaire Tested: **SQ4-BB-125U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518788  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

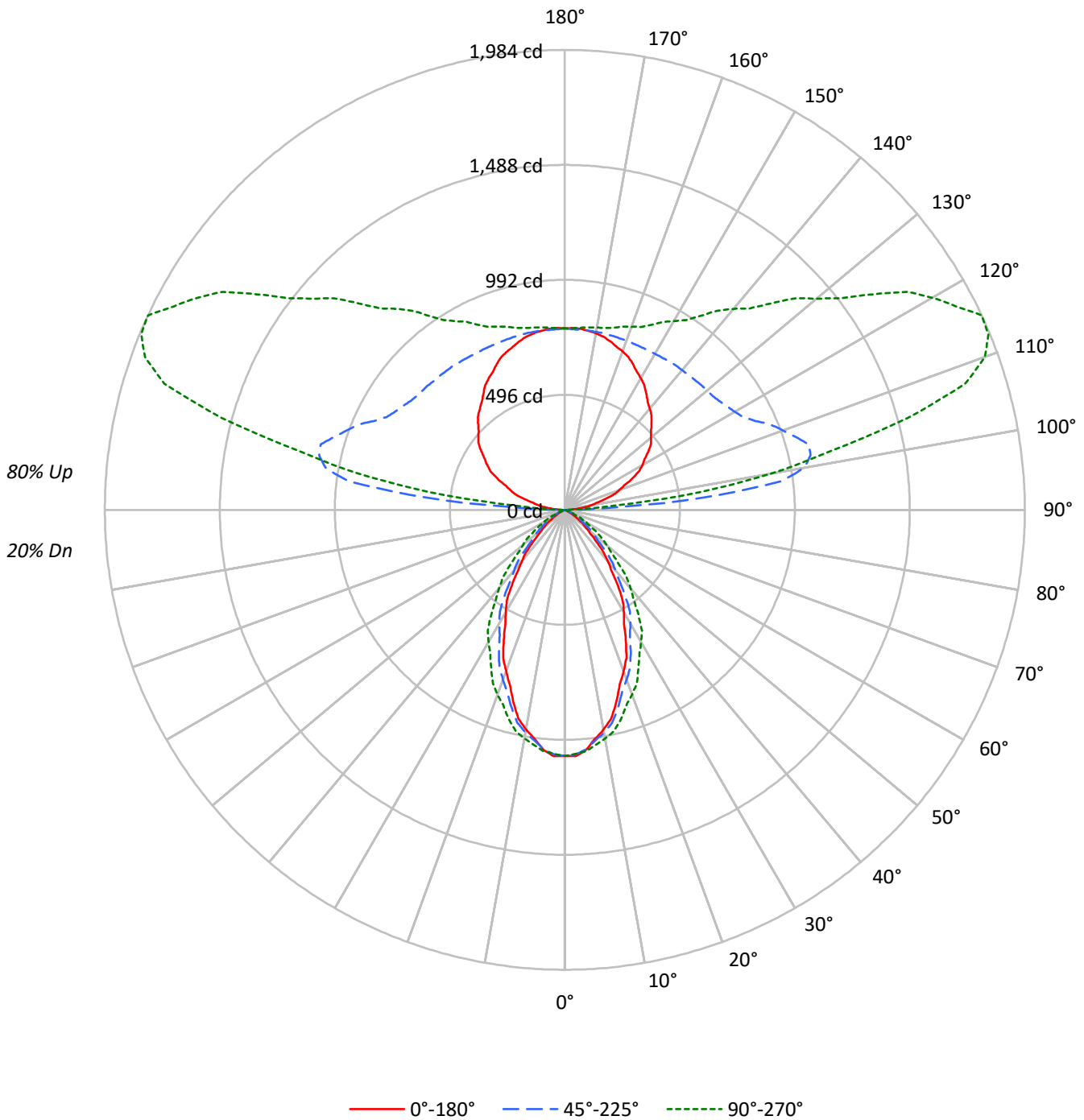
Lumens per Lamp: N/A  
Luminaire Lumens: 6317.5 lumens  
Efficiency: N/A  
Efficacy: 131.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 47.9  
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9792	9792	9792
5°	9635	9611	9682
10°	9014	9134	9390
15°	8195	8455	8926
20°	7274	7652	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4500	5112	6234
40°	3457	4088	5313
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1668	2635
60°	635	1175	1904
65°	168	718	965
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.9	1.5
10°-20°	247.7	3.9
20°-30°	310.1	4.9
30°-40°	286.4	4.5
40°-50°	192.5	3.0
50°-60°	99.4	1.6
60°-70°	31.1	0.5
70°-80°	2.0	0.0
80°-90°	1.9	0.0
90°-100°	365.9	5.8
100°-110°	985.7	15.6
110°-120°	1034.5	16.4
120°-130°	839.4	13.3
130°-140°	658.3	10.4
140°-150°	505.4	8.0
150°-160°	363.4	5.8
160°-170°	222.0	3.5
170°-180°	74.9	1.2
0°-30°	654.6	10.4
0°-40°	941.1	14.9
0°-60°	1232.9	19.5
0°-90°	1267.9	20.1
90°-120°	2386.1	37.8
90°-150°	4389.3	69.5
90°-180°	5050.0	79.9
0°-180°	6317.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1040	1030	1038	1041	1045	96
15°	858	855	885	915	934	239
25°	622	627	672	718	751	285
35°	400	410	454	507	554	247
45°	192	203	237	283	328	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	6	12	13	13	4
95°	56	199	600	307	212	58
105°	182	284	1090	1631	1530	192
115°	322	394	908	1754	1984	317
125°	439	505	815	1378	1621	392
135°	529	590	792	1111	1258	408
145°	612	660	782	950	1020	384
155°	694	720	775	853	880	320
165°	753	762	778	809	813	212
175°	783	782	779	790	788	74
180°	782	782	782	782	782	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1061.3	1061.3	1061.3	1061.3	1061.3
2.5°	1063.8	1053.7	1056.4	1056.3	1053.5
5°	1040.3	1029.7	1037.7	1041.4	1045.4
7.5°	996.3	988.1	1003.4	1014.9	1023.2
10°	962.2	955.2	975.0	990.7	1002.3
12.5°	922.8	917.4	941.4	962.9	977.6
15°	858.0	855.0	885.2	914.9	934.5
17.5°	788.6	788.5	823.0	859.9	883.4
20°	740.9	742.4	779.4	820.1	847.7
22.5°	693.3	696.8	736.3	778.7	810.3
25°	622.3	627.3	671.6	717.5	751.2
27.5°	554.1	561.4	608.0	655.8	696.8
30°	509.3	517.9	565.3	615.6	657.7
32.5°	465.4	475.5	521.8	574.9	617.9
35°	399.5	409.5	453.9	507.3	553.5
37.5°	331.4	341.2	384.6	437.2	487.1
40°	287.0	298.1	339.4	390.4	441.1
42.5°	246.8	257.8	296.7	346.7	394.6
45°	191.5	203.1	237.2	283.4	327.6
47.5°	145.7	158.3	188.2	230.0	270.3
50°	118.6	131.2	160.7	197.5	236.2
52.5°	96.8	109.0	135.7	170.3	205.8
55°	68.8	80.3	103.7	133.2	163.8
57.5°	47.5	57.5	78.5	103.0	127.0
60°	34.4	43.9	63.7	83.6	103.2
62.5°	22.9	31.6	50.9	66.2	79.4
65°	7.7	14.7	32.9	39.6	44.2
67.5°	3.9	4.7	17.3	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.2	2.4	2.6	2.6
90°	2.0	5.9	12.0	13.0	13.0
92.5°	24.3	85.9	169.8	81.7	56.8
95°	55.8	199.0	599.9	306.8	212.2
97.5°	89.1	227.8	940.8	786.0	592.7
100°	114.6	239.3	1049.3	1097.8	910.8
102.5°	139.3	255.4	1085.1	1331.4	1177.8
105°	182.3	283.7	1090.1	1630.9	1530.5
107.5°	223.0	313.4	1043.7	1784.8	1810.7
110°	250.1	335.8	1001.4	1832.6	1927.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	278.8	358.3	960.8	1822.0	1977.3
115°	321.9	394.0	907.8	1754.0	1983.9
117.5°	361.1	428.7	866.7	1645.4	1901.4
120°	386.6	451.9	846.0	1567.4	1830.5
122.5°	408.9	473.4	830.8	1487.7	1750.0
125°	439.4	504.7	815.1	1377.6	1621.2
127.5°	468.7	533.0	805.1	1280.6	1498.1
130°	486.3	550.6	801.1	1225.0	1416.0
132.5°	503.8	567.3	797.2	1176.0	1351.4
135°	529.1	590.5	792.2	1111.4	1258.5
137.5°	553.2	612.1	789.6	1056.6	1177.4
140°	570.0	626.5	787.2	1022.8	1132.0
142.5°	587.5	640.1	785.6	991.4	1083.3
145°	611.8	659.6	782.2	950.2	1020.4
147.5°	638.1	679.6	778.8	915.6	970.7
150°	655.7	691.7	777.2	893.9	939.6
152.5°	671.6	703.0	776.4	876.1	913.3
155°	694.5	719.9	775.2	852.6	879.9
157.5°	714.7	734.3	775.4	836.0	854.4
160°	727.4	744.0	776.2	826.4	840.0
162.5°	738.6	752.0	777.0	818.3	828.0
165°	753.3	762.1	778.2	809.2	813.1
167.5°	765.3	770.3	779.2	802.2	803.7
170°	773.2	775.2	779.2	798.2	798.2
172.5°	778.0	778.4	780.0	794.2	794.2
175°	783.2	782.2	779.2	790.1	788.2
177.5°	785.4	783.8	779.8	786.2	784.6
180°	782.2	782.2	782.2	782.2	782.2

(END OF REPORT)