

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: P518586

Luminaire Tested: **SQ4-BB-075U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518586
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-125D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

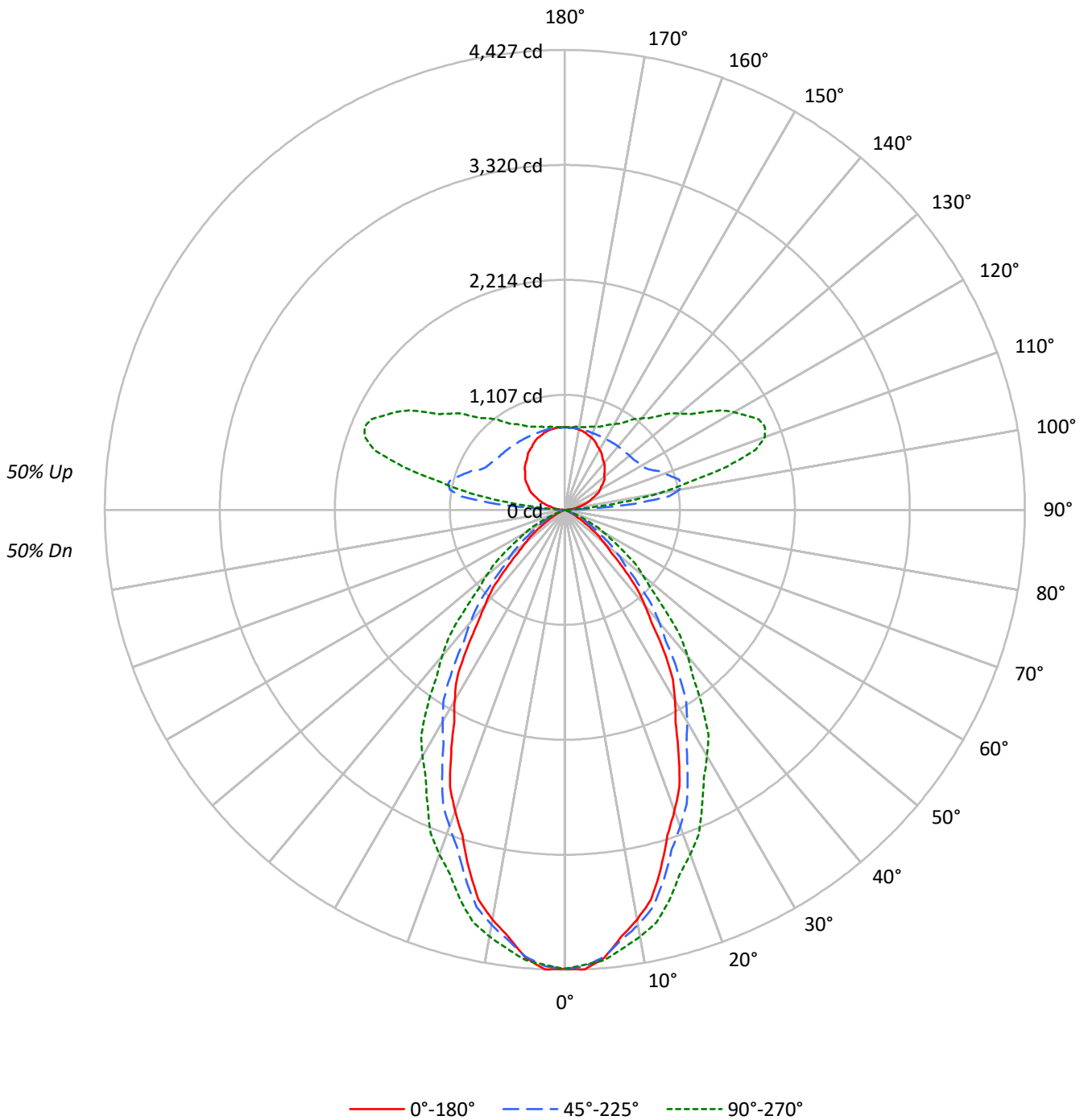
Lumens per Lamp: N/A
Luminaire Lumens: 10447.4 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 127.7
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	38
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20377	20377	20377
5°	20049	19999	20148
10°	18759	19009	19539
15°	17054	17595	18575
20°	15138	15925	17320
25°	13183	14227	15913
30°	11292	12533	14581
35°	9363	10639	12973
40°	7194	8506	11054
45°	5200	6441	8895
50°	3542	4801	7055
55°	2303	3472	5483
60°	1321	2445	3963
65°	350	1493	2006
70°	173	461	576
75°	77	37	0
80°	56	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	403.1	3.9
10°-20°	1030.9	9.9
20°-30°	1290.6	12.4
30°-40°	1192.0	11.4
40°-50°	801.0	7.7
50°-60°	413.7	4.0
60°-70°	129.6	1.2
70°-80°	8.2	0.1
80°-90°	2.2	0.0
90°-100°	374.7	3.6
100°-110°	1031.0	9.9
110°-120°	1064.2	10.2
120°-130°	852.6	8.2
130°-140°	669.7	6.4
140°-150°	513.2	4.9
150°-160°	369.0	3.5
160°-170°	225.6	2.2
170°-180°	76.1	0.7
0°-30°	2724.5	26.1
0°-40°	3916.6	37.5
0°-60°	5131.3	49.1
0°-90°	5271.2	50.5
90°-120°	2470.0	23.6
90°-150°	4505.5	43.1
90°-180°	5176.0	49.5
0°-180°	10447.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4417	4417	4417	4417	4417	
5°	4330	4286	4319	4334	4351	401
15°	3571	3558	3684	3808	3889	995
25°	2590	2611	2795	2986	3126	1187
35°	1663	1704	1889	2111	2304	1030
45°	797	845	987	1180	1363	626
55°	286	334	432	554	682	267
65°	32	61	137	165	184	54
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	2	7	12	15	15	4
95°	56	205	663	283	181	59
105°	184	283	1136	1730	1614	194
115°	326	397	911	1814	2059	322
125°	450	512	827	1398	1638	401
135°	543	602	803	1131	1280	419
145°	627	670	791	964	1038	393
155°	710	733	786	866	891	326
165°	768	777	790	822	827	216
175°	794	796	791	801	800	75
180°	794	794	794	794	794	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4417.1	4417.1	4417.1	4417.1	4417.1
2.5°	4427.4	4385.6	4396.6	4396.3	4384.6
5°	4329.5	4285.6	4318.8	4334.1	4350.9
7.5°	4146.6	4112.3	4176.0	4223.9	4258.5
10°	4004.7	3975.4	4058.1	4123.3	4171.3
12.5°	3840.5	3818.0	3917.9	4007.3	4068.8
15°	3570.9	3558.3	3684.1	3807.8	3889.3
17.5°	3281.9	3281.5	3425.1	3578.6	3676.9
20°	3083.6	3089.9	3243.9	3413.2	3528.1
22.5°	2885.3	2900.0	3064.4	3240.9	3372.6
25°	2590.0	2610.9	2795.1	2986.4	3126.4
27.5°	2306.2	2336.7	2530.6	2729.4	2899.9
30°	2119.9	2155.4	2352.8	2561.9	2737.4
32.5°	1936.9	1979.1	2171.6	2392.8	2571.6
35°	1662.6	1704.3	1889.1	2111.4	2303.6
37.5°	1379.2	1420.1	1600.6	1819.4	2027.1
40°	1194.6	1240.5	1412.5	1624.6	1835.6
42.5°	1027.0	1073.0	1234.7	1443.1	1642.5
45°	797.1	845.1	987.3	1179.5	1363.4
47.5°	606.5	658.7	783.4	957.3	1124.9
50°	493.6	545.9	668.9	822.1	983.0
52.5°	403.0	453.6	564.6	709.0	856.5
55°	286.4	334.4	431.7	554.2	681.7
57.5°	197.9	239.3	326.5	428.8	528.7
60°	143.2	182.9	265.0	348.0	429.5
62.5°	95.3	131.7	212.0	275.6	330.4
65°	32.1	61.3	136.8	165.0	183.8
67.5°	16.2	19.6	71.8	75.8	82.1
70°	12.8	12.8	34.2	36.5	42.7
72.5°	9.4	9.4	13.7	17.6	18.8
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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	1.3	2.4	3.0	3.0
90°	1.7	6.6	11.8	15.2	15.2
92.5°	23.3	99.7	172.8	66.3	54.4
95°	55.8	204.6	662.7	283.4	180.9
97.5°	90.9	226.8	1011.3	779.2	549.8
100°	116.6	240.6	1120.8	1131.3	923.0
102.5°	141.0	257.0	1149.2	1403.5	1212.4
105°	184.3	283.4	1136.0	1730.2	1614.4
107.5°	225.5	316.1	1071.5	1890.1	1924.5
110°	255.3	337.9	1022.8	1929.9	2048.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	282.3	362.3	974.1	1904.3	2085.4
115°	326.3	397.3	911.2	1814.4	2059.1
117.5°	368.2	433.7	871.3	1688.4	1965.1
120°	393.9	456.7	853.7	1593.9	1879.9
122.5°	416.9	479.7	841.5	1511.1	1782.5
125°	449.7	512.5	826.7	1398.4	1638.1
127.5°	480.8	540.6	816.9	1304.4	1514.7
130°	497.0	558.2	811.4	1248.6	1440.3
132.5°	515.9	577.1	807.4	1199.5	1372.7
135°	542.7	602.2	803.0	1131.0	1279.7
137.5°	567.7	622.9	799.3	1075.6	1198.2
140°	586.6	637.9	797.9	1038.8	1149.6
142.5°	602.8	650.1	795.2	1006.0	1100.9
145°	627.2	670.2	791.2	963.6	1038.0
147.5°	653.2	690.2	789.1	926.1	985.6
150°	669.4	702.5	787.8	905.5	951.8
152.5°	684.3	714.7	786.4	887.7	926.1
155°	710.0	733.2	786.1	866.1	890.9
157.5°	728.6	747.5	786.1	848.4	865.5
160°	742.1	757.0	786.1	838.8	852.0
162.5°	753.0	765.2	787.4	830.6	841.2
165°	767.5	777.4	789.5	821.7	826.7
167.5°	777.6	785.2	791.2	814.2	815.5
170°	784.4	789.4	791.2	811.4	811.4
172.5°	789.8	792.1	791.2	807.4	806.0
175°	794.5	796.2	791.2	801.3	799.6
177.5°	795.9	795.9	790.5	798.5	795.9
180°	794.5	794.5	794.5	794.5	794.5

(END OF REPORT)