

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: P519147

Luminaire Tested: **SQ4-WB-050U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519147
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

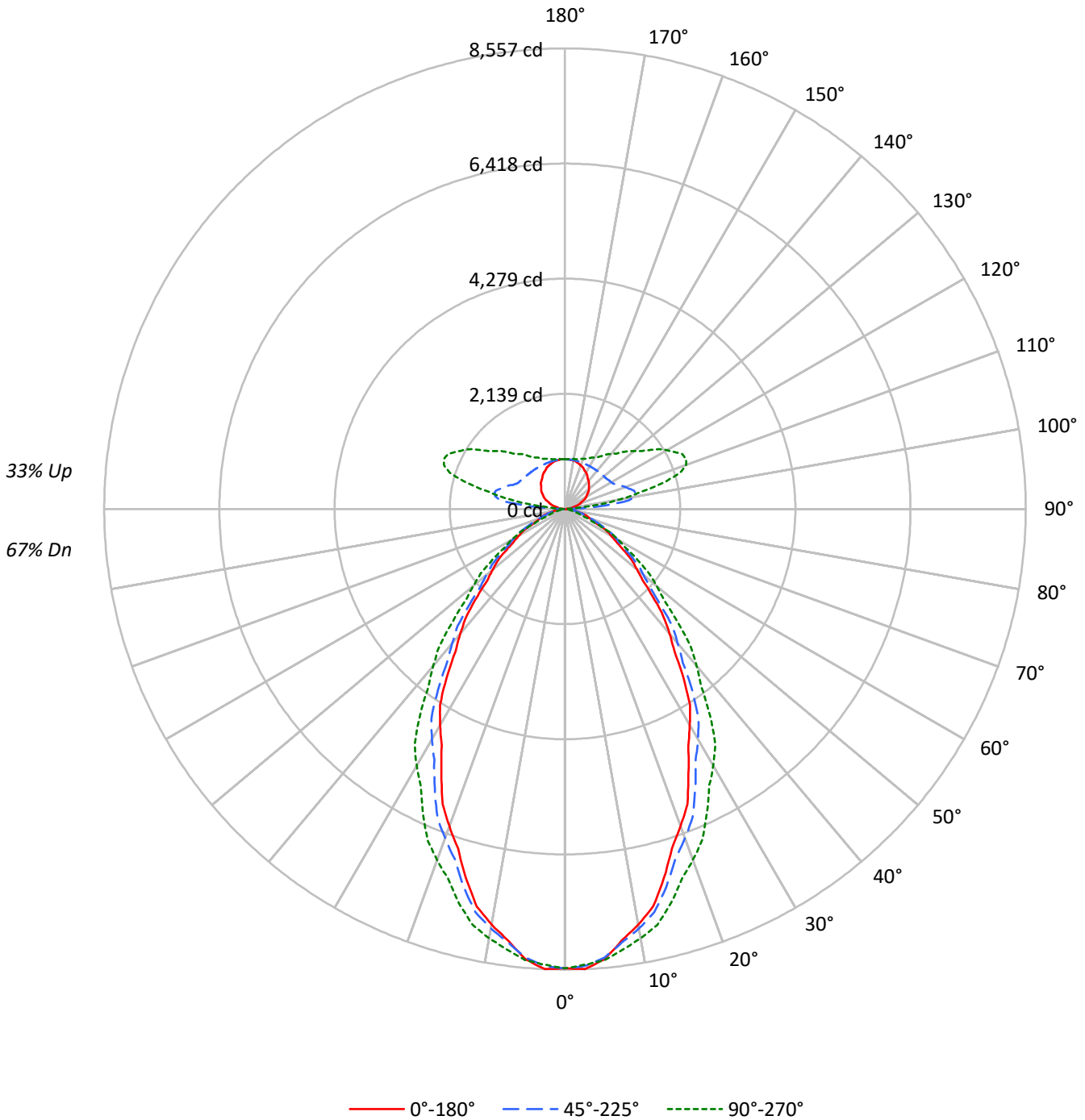
Lumens per Lamp: N/A
Luminaire Lumens: 18478.2 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 167
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



TEST NUMBER: P519147
CATALOG NUMBER: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P519147

CATALOG NUMBER: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25982
10°	24493	24715	25288
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15440	17648
40°	12120	13083	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7812	8776
60°	6059	6773	7004
65°	4825	5696	4525
70°	4277	4446	2761
75°	3962	3605	1691
80°	3648	3317	1459
85°	3303	3038	1189



TEST NUMBER: P519147

CATALOG NUMBER: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	783.0	4.2
10°-20°	2036.5	11.0
20°-30°	2637.9	14.3
30°-40°	2583.2	14.0
40°-50°	1977.3	10.7
50°-60°	1317.6	7.1
60°-70°	719.0	3.9
70°-80°	299.6	1.6
80°-90°	88.4	0.5
90°-100°	443.8	2.4
100°-110°	1205.5	6.5
110°-120°	1239.5	6.7
120°-130°	991.0	5.4
130°-140°	778.7	4.2
140°-150°	597.1	3.2
150°-160°	429.4	2.3
160°-170°	262.6	1.4
170°-180°	88.5	0.5
0°-30°	5457.4	29.5
0°-40°	8040.6	43.5
0°-60°	11335.4	61.3
0°-90°	12442.3	67.3
90°-120°	2888.8	15.6
90°-150°	5255.5	28.4
90°-180°	6036.0	32.7
0°-180°	18478.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8536	8536	8536	8536	8536	
5°	8398	8313	8368	8387	8416	781
15°	7102	7076	7266	7464	7592	1983
25°	5427	5442	5723	5973	6236	2496
35°	3836	3854	4113	4389	4701	2384
45°	2300	2344	2498	2687	2933	1793
55°	1322	1377	1457	1512	1637	1199
65°	663	718	783	684	622	689
75°	333	333	303	208	142	356
85°	94	94	86	56	34	102
90°	3	12	21	27	27	9
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	



TEST NUMBER: P519147

CATALOG NUMBER: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8536.2	8536.2	8536.2	8536.2	8536.2
2.5°	8557.2	8481.0	8500.2	8499.7	8476.3
5°	8397.6	8313.4	8367.6	8387.0	8416.3
7.5°	8086.0	8022.2	8121.2	8194.4	8253.8
10°	7843.2	7788.3	7914.4	8021.0	8097.9
12.5°	7561.6	7515.4	7671.7	7814.8	7915.2
15°	7101.6	7076.0	7266.4	7464.1	7592.3
17.5°	6609.5	6597.0	6815.5	7046.2	7210.2
20°	6273.8	6270.2	6509.8	6750.1	6940.6
22.5°	5935.2	5943.3	6195.2	6445.1	6661.9
25°	5427.3	5442.0	5723.2	5972.7	6236.4
27.5°	4957.7	4964.2	5255.1	5518.4	5799.7
30°	4637.0	4655.3	4940.4	5213.0	5506.0
32.5°	4316.4	4337.6	4616.8	4898.5	5197.4
35°	3835.5	3853.8	4112.6	4389.4	4700.7
37.5°	3339.6	3364.5	3594.3	3855.9	4162.1
40°	3018.9	3055.6	3258.7	3505.2	3805.5
42.5°	2710.3	2755.7	2944.0	3177.9	3448.9
45°	2299.8	2343.7	2498.3	2687.4	2932.8
47.5°	1946.2	1996.7	2115.5	2278.3	2487.8
50°	1745.4	1793.1	1902.8	2023.4	2221.1
52.5°	1568.6	1616.3	1714.0	1807.0	1975.4
55°	1322.2	1377.1	1457.0	1512.3	1636.8
57.5°	1119.9	1172.7	1236.0	1261.0	1336.4
60°	985.1	1043.7	1101.2	1098.4	1138.7
62.5°	862.2	912.0	969.4	929.7	931.9
65°	663.0	717.9	782.8	684.0	621.8
67.5°	535.6	547.3	614.3	477.0	403.0
70°	475.7	475.7	494.4	369.4	307.1
72.5°	418.8	418.8	401.5	300.4	235.2
75°	333.4	333.4	303.4	208.3	142.3
77.5°	256.9	254.0	232.2	155.4	103.4
80°	206.0	206.0	187.3	122.7	82.4
82.5°	161.1	161.1	145.3	95.9	61.4
85°	93.6	93.6	86.1	55.7	33.7
87.5°	33.6	35.3	34.1	23.3	20.3
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8



TEST NUMBER: P519147

CATALOG NUMBER: SQ4-WB-050U-125D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)