

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: P519139

Luminaire Tested: **SQ4-WB-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519139
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

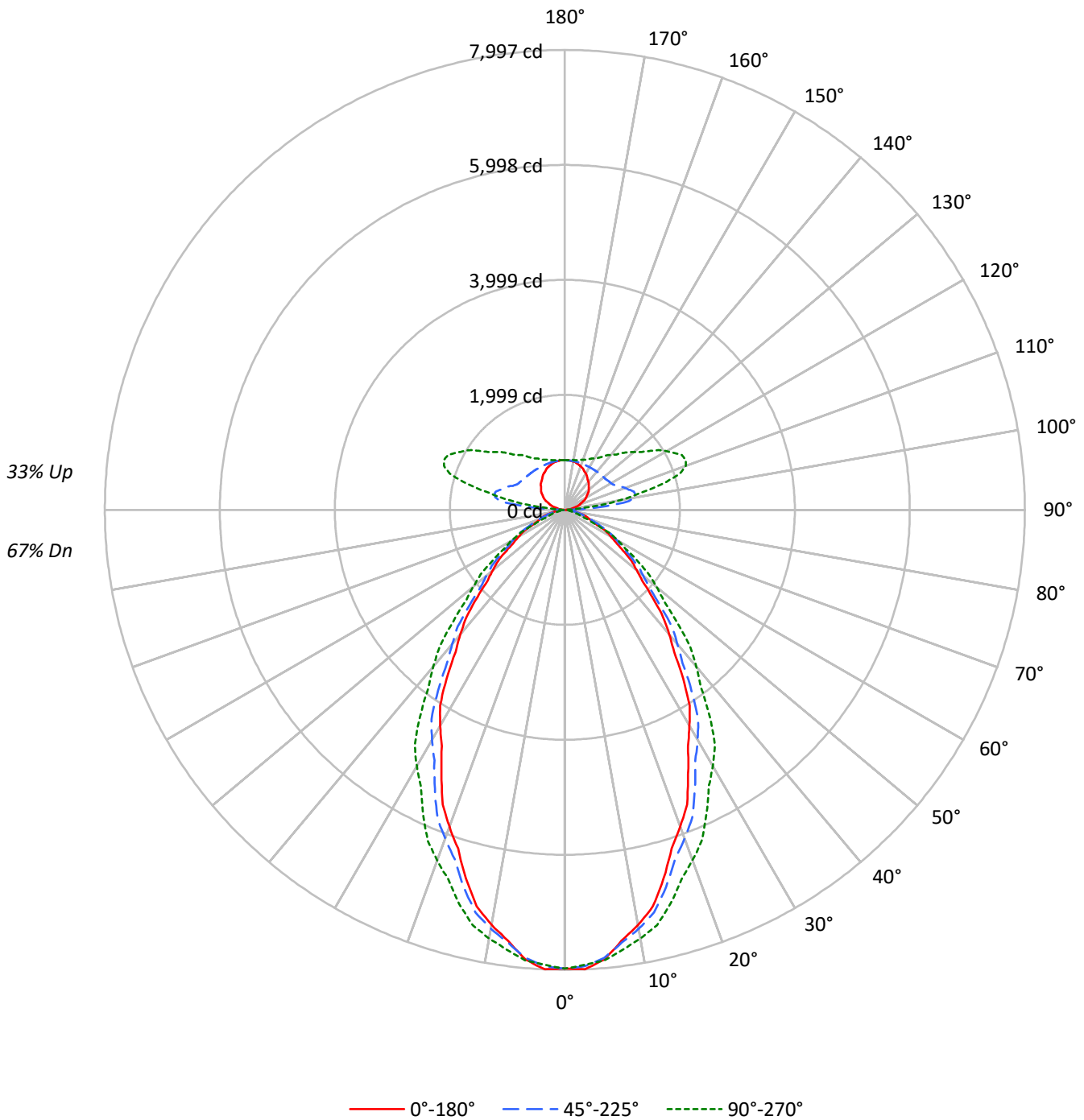
Lumens per Lamp: N/A
Luminaire Lumens: 17267.7 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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



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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	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°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23096	23632
15°	21130	21620	22589
20°	19188	19910	21227
25°	17210	18149	19776
30°	15388	16395	18272
35°	13456	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7804	8507	9931
55°	6625	7301	8201
60°	5662	6330	6545
65°	4508	5323	4228
70°	3997	4154	2581
75°	3701	3369	1580
80°	3409	3099	1364
85°	3088	2841	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	731.7	4.2
10°-20°	1903.1	11.0
20°-30°	2465.1	14.3
30°-40°	2413.9	14.0
40°-50°	1847.7	10.7
50°-60°	1231.2	7.1
60°-70°	671.9	3.9
70°-80°	280.0	1.6
80°-90°	82.6	0.5
90°-100°	414.7	2.4
100°-110°	1126.6	6.5
110°-120°	1158.3	6.7
120°-130°	926.1	5.4
130°-140°	727.6	4.2
140°-150°	557.9	3.2
150°-160°	401.2	2.3
160°-170°	245.4	1.4
170°-180°	82.7	0.5
0°-30°	5099.9	29.5
0°-40°	7513.8	43.5
0°-60°	10592.8	61.3
0°-90°	11627.2	67.3
90°-120°	2699.5	15.6
90°-150°	4911.2	28.4
90°-180°	5640.0	32.7
0°-180°	17267.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7977	7977	7977	7977	7977	
5°	7848	7769	7820	7838	7865	730
15°	6636	6612	6790	6975	7095	1853
25°	5072	5086	5348	5581	5828	2332
35°	3584	3601	3843	4102	4393	2228
45°	2149	2190	2335	2511	2741	1676
55°	1236	1287	1362	1413	1530	1120
65°	620	671	732	639	581	644
75°	312	312	284	195	133	333
85°	88	88	80	52	32	95
90°	3	11	19	25	25	8
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

TEST NUMBER: P519139

CATALOG NUMBER: SQ4-WB-050U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7977.0	7977.0	7977.0	7977.0	7977.0
2.5°	7996.6	7925.4	7943.4	7942.9	7921.0
5°	7847.5	7768.7	7819.5	7837.6	7865.0
7.5°	7556.2	7496.7	7589.1	7657.6	7713.1
10°	7329.4	7278.1	7395.9	7495.6	7567.4
12.5°	7066.2	7023.1	7169.1	7302.9	7396.6
15°	6636.4	6612.4	6790.4	6975.1	7094.9
17.5°	6176.5	6164.8	6369.0	6584.6	6737.9
20°	5862.8	5859.4	6083.4	6307.9	6485.9
22.5°	5546.4	5554.0	5789.3	6022.9	6225.5
25°	5071.8	5085.5	5348.3	5581.4	5827.8
27.5°	4632.9	4639.0	4910.8	5156.9	5419.7
30°	4333.3	4350.4	4616.8	4871.5	5145.3
32.5°	4033.6	4053.5	4314.4	4577.6	4856.9
35°	3584.2	3601.3	3843.2	4101.9	4392.8
37.5°	3120.8	3144.1	3358.8	3603.3	3889.4
40°	2821.2	2855.4	3045.2	3275.6	3556.2
42.5°	2532.7	2575.2	2751.2	2969.7	3223.0
45°	2149.1	2190.2	2334.6	2511.4	2740.7
47.5°	1818.7	1865.9	1976.9	2129.1	2324.8
50°	1631.1	1675.6	1778.1	1890.8	2075.6
52.5°	1465.9	1510.4	1601.7	1688.6	1846.0
55°	1235.6	1286.9	1361.6	1413.2	1529.6
57.5°	1046.6	1095.8	1155.1	1178.4	1248.9
60°	920.6	975.3	1029.1	1026.4	1064.1
62.5°	805.7	852.3	905.9	868.8	870.9
65°	619.5	670.9	731.5	639.2	581.0
67.5°	500.5	511.5	574.0	445.8	376.6
70°	444.5	444.5	462.0	345.2	287.0
72.5°	391.3	391.3	375.2	280.7	219.8
75°	311.5	311.5	283.5	194.6	133.0
77.5°	240.1	237.4	217.0	145.2	96.6
80°	192.5	192.5	175.0	114.7	77.0
82.5°	150.5	150.5	135.8	89.6	57.4
85°	87.5	87.5	80.5	52.0	31.5
87.5°	31.4	33.0	31.9	21.7	19.0
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1

TEST NUMBER: P519139

CATALOG NUMBER: SQ4-WB-050U-125D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)