

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521792

Luminaire Tested: **SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521792
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

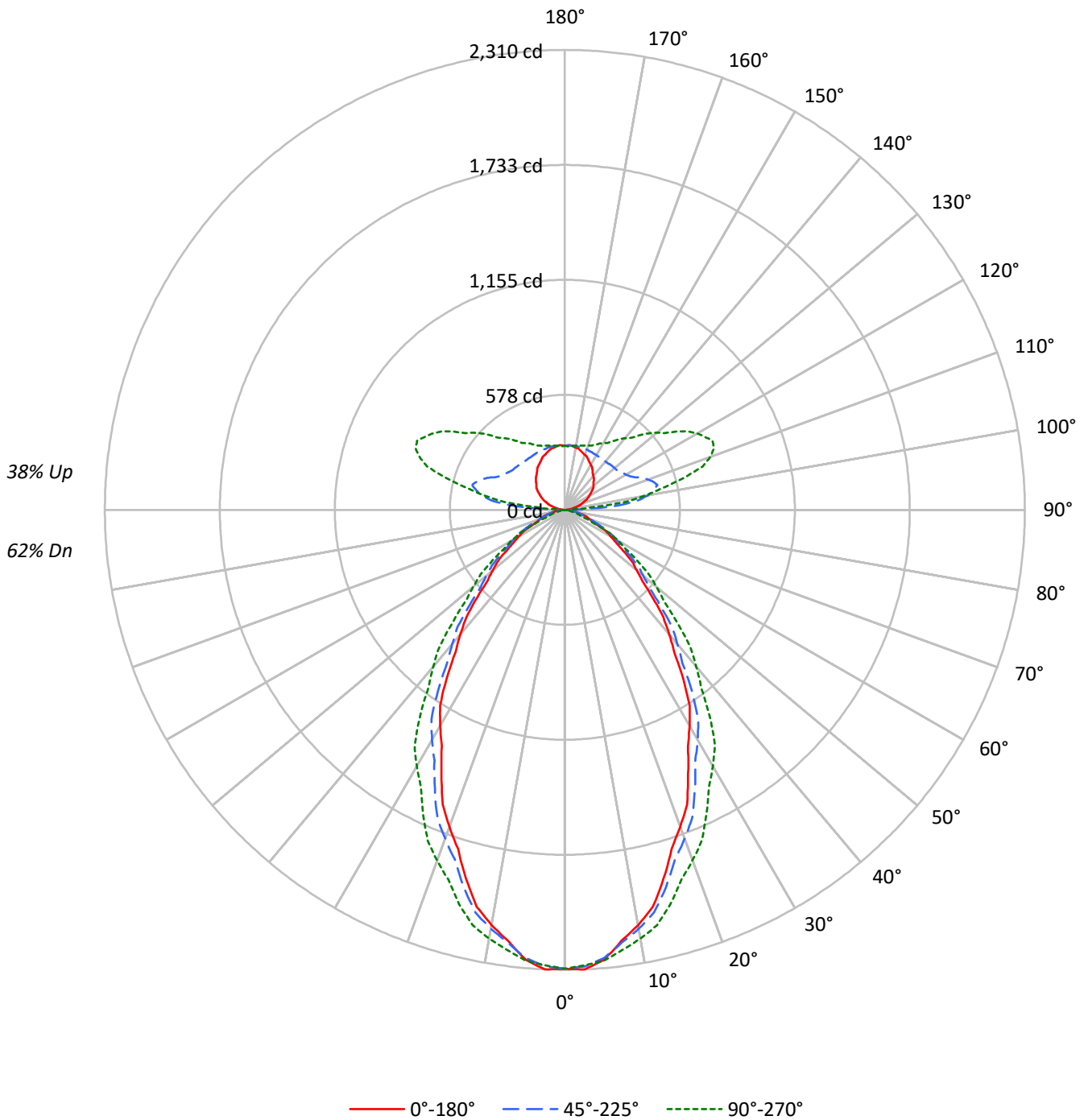
Lumens per Lamp: N/A
Luminaire Lumens: 5441.8 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.5
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62		
1	102	98	95	91	95	92	89	86	81	79	77	71	69	68	61	60	59	55		
2	94	87	82	77	88	82	77	73	73	69	66	64	61	59	56	54	52	48		
3	87	78	71	66	81	74	68	63	65	61	57	58	54	52	51	48	46	43		
4	80	70	63	57	75	66	60	55	59	54	50	53	49	46	46	44	41	38		
5	74	63	56	50	70	60	53	48	54	49	45	48	44	41	43	39	37	34		
6	69	58	50	45	65	55	48	43	49	44	40	44	40	37	39	36	33	31		
7	64	53	45	40	60	50	43	39	45	40	36	41	36	33	36	33	30	28		
8	60	48	41	36	56	46	39	35	42	36	32	38	33	30	34	30	28	26		
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	25	24		
10	53	41	34	30	50	39	33	29	36	31	27	33	28	25	30	26	24	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21265	21265	21265
5°	20999	20924	21046
10°	19840	20020	20484
15°	18315	18739	19580
20°	16632	17258	18400
25°	14918	15731	17141
30°	13338	14211	15837
35°	11664	12507	14295
40°	9817	10596	12375
45°	8101	8801	10333
50°	6765	7373	8608
55°	5742	6328	7108
60°	4908	5486	5672
65°	3908	4615	3665
70°	3464	3601	2236
75°	3208	2920	1369
80°	2954	2688	1180
85°	2678	2467	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.4	3.9
10°-20°	549.9	10.1
20°-30°	712.2	13.1
30°-40°	697.5	12.8
40°-50°	533.9	9.8
50°-60°	355.7	6.5
60°-70°	194.1	3.6
70°-80°	80.9	1.5
80°-90°	22.9	0.4
90°-100°	165.9	3.0
100°-110°	400.9	7.4
110°-120°	427.6	7.9
120°-130°	346.3	6.4
130°-140°	268.1	4.9
140°-150°	204.5	3.8
150°-160°	148.0	2.7
160°-170°	91.2	1.7
170°-180°	30.9	0.6
0°-30°	1473.5	27.1
0°-40°	2171.0	39.9
0°-60°	3060.6	56.2
0°-90°	3358.5	61.7
90°-120°	994.3	18.3
90°-150°	1813.2	33.3
90°-180°	2083.0	38.3
0°-180°	5441.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2305	2305	2305	2305	2305	
5°	2267	2245	2259	2264	2272	211
15°	1918	1910	1962	2015	2050	535
25°	1465	1469	1545	1613	1684	674
35°	1036	1040	1110	1185	1269	644
45°	621	633	674	726	792	484
55°	357	372	393	408	442	324
65°	179	194	211	185	168	186
75°	90	90	82	56	38	96
85°	25	25	23	15	9	27
90°	0	0	0	0	0	2
95°	16	83	284	185	130	18
105°	64	111	482	623	615	68
115°	117	150	387	734	818	116
125°	167	192	336	584	686	149
135°	205	229	322	460	530	158
145°	243	261	316	391	422	152
155°	278	290	320	346	359	128
165°	307	312	324	329	334	87
175°	325	324	325	322	322	31
180°	322	322	322	322	322	

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CATALOG NUMBER: SQ4-WB-050U-100D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2304.8	2304.8	2304.8	2304.8	2304.8
2.5°	2310.4	2289.9	2295.1	2294.9	2288.6
5°	2267.4	2244.6	2259.3	2264.5	2272.4
7.5°	2183.2	2166.0	2192.7	2212.5	2228.5
10°	2117.7	2102.9	2136.9	2165.7	2186.5
12.5°	2041.6	2029.2	2071.4	2110.0	2137.1
15°	1917.5	1910.5	1961.9	2015.3	2049.9
17.5°	1784.6	1781.2	1840.2	1902.5	1946.8
20°	1694.0	1693.0	1757.7	1822.5	1874.0
22.5°	1602.5	1604.7	1672.7	1740.2	1798.7
25°	1465.4	1469.3	1545.3	1612.6	1683.8
27.5°	1338.6	1340.4	1418.9	1490.0	1565.9
30°	1252.0	1257.0	1333.9	1407.5	1486.6
32.5°	1165.4	1171.2	1246.5	1322.6	1403.3
35°	1035.6	1040.5	1110.4	1185.1	1269.2
37.5°	901.7	908.4	970.5	1041.1	1123.8
40°	815.1	825.0	879.8	946.4	1027.5
42.5°	731.8	744.0	794.9	858.0	931.2
45°	620.9	632.8	674.5	725.6	791.9
47.5°	525.5	539.1	571.2	615.2	671.7
50°	471.3	484.1	513.7	546.3	599.7
52.5°	423.5	436.4	462.8	487.9	533.4
55°	357.0	371.8	393.4	408.3	441.9
57.5°	302.4	316.6	333.7	340.5	360.8
60°	266.0	281.8	297.3	296.6	307.4
62.5°	232.8	246.3	261.7	251.0	251.6
65°	179.0	193.8	211.4	184.7	167.9
67.5°	144.6	147.8	165.9	128.8	108.8
70°	128.4	128.4	133.5	99.7	82.9
72.5°	113.1	113.1	108.4	81.1	63.5
75°	90.0	90.0	81.9	56.2	38.4
77.5°	69.4	68.6	62.7	42.0	27.9
80°	55.6	55.6	50.6	33.1	22.2
82.5°	43.5	43.5	39.2	25.9	16.6
85°	25.3	25.3	23.3	15.0	9.1
87.5°	8.9	8.9	8.1	4.8	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	44.9	105.8	51.4	34.9
95°	16.4	83.0	284.2	184.8	129.5
97.5°	29.0	91.9	374.3	360.6	309.5
100°	38.8	97.5	423.9	447.5	405.5
102.5°	48.1	102.5	456.6	519.8	494.9
105°	64.1	110.7	481.8	623.4	615.4
107.5°	79.7	120.4	466.9	706.4	725.2
110°	90.6	128.6	443.0	742.3	777.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.5	136.9	421.7	751.0	811.4
115°	117.2	149.9	387.1	733.8	818.5
117.5°	132.8	163.5	366.8	694.4	793.5
120°	143.1	171.8	353.7	663.4	767.3
122.5°	154.0	180.5	345.5	631.7	734.1
125°	167.0	192.3	336.0	583.6	685.6
127.5°	179.8	203.6	329.3	542.9	632.4
130°	187.4	210.7	327.1	514.5	602.4
132.5°	194.5	218.9	323.8	494.0	568.6
135°	205.1	229.1	322.3	460.2	529.5
137.5°	215.2	239.3	317.6	437.3	489.6
140°	222.8	244.8	317.6	420.9	468.9
142.5°	230.5	252.5	314.8	406.5	447.0
145°	242.6	260.6	316.2	391.2	421.8
147.5°	253.9	271.4	315.4	373.5	398.8
150°	261.0	276.3	317.6	365.7	385.7
152.5°	268.6	283.4	317.0	357.5	375.4
155°	278.0	290.0	320.3	346.5	359.1
157.5°	289.4	299.6	319.6	342.3	349.7
160°	293.7	302.4	322.3	336.8	342.1
162.5°	300.8	308.4	321.2	335.1	338.3
165°	307.3	312.0	324.4	329.3	333.9
167.5°	315.4	318.5	323.6	328.9	329.0
170°	317.6	319.6	325.7	325.1	328.5
172.5°	321.4	322.9	324.1	325.6	323.6
175°	325.1	323.7	325.1	322.3	321.7
177.5°	324.4	324.4	323.3	322.1	319.5
180°	321.7	321.7	321.7	321.7	321.7

(END OF REPORT)