

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: P521779

Luminaire Tested: **SQ4-WB-050U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521779
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-075D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 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

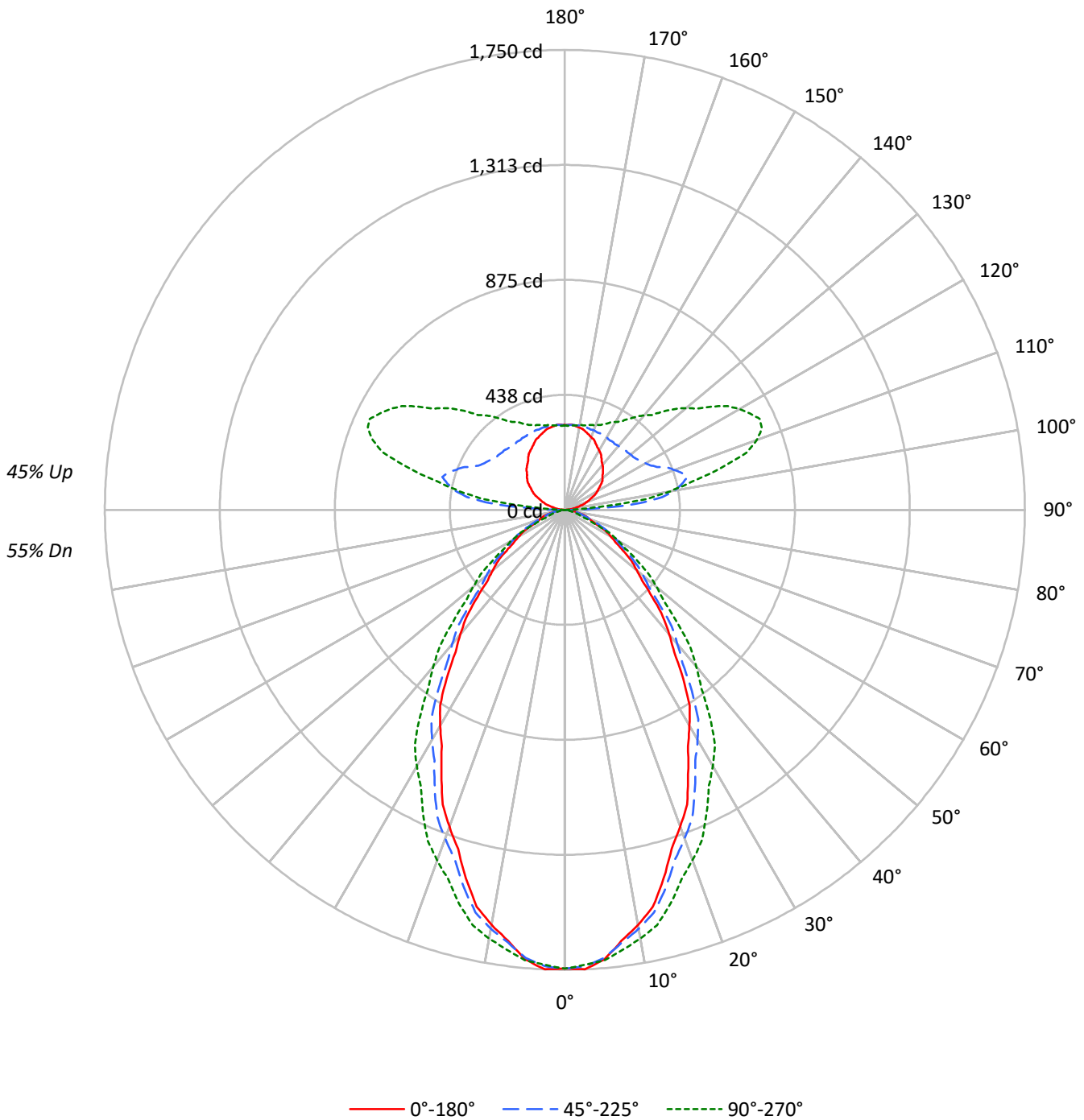
Lumens per Lamp: N/A
Luminaire Lumens: 4627.1 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55		
1	100	96	93	90	93	90	87	84	77	75	73	66	65	63	56	55	54	49		
2	92	86	80	75	86	80	75	71	69	66	63	60	57	55	51	49	47	43		
3	85	76	70	64	79	72	66	61	62	58	54	54	51	48	46	44	42	38		
4	79	69	61	56	73	64	58	53	56	52	48	49	45	42	42	39	37	34		
5	73	62	54	49	68	58	52	47	51	46	42	45	41	38	39	36	33	30		
6	67	56	49	43	63	53	46	41	47	41	38	41	37	34	36	33	30	27		
7	63	51	44	39	58	48	42	37	43	38	34	38	34	31	33	30	27	25		
8	59	47	40	35	55	44	38	33	40	34	30	35	31	28	31	27	25	23		
9	55	43	36	31	51	41	35	30	37	31	28	32	28	25	29	25	23	21		
10	51	40	33	29	48	38	32	27	34	29	25	30	26	23	27	24	21	19		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16106	16106	16106
5°	15906	15848	15941
10°	15027	15163	15515
15°	13872	14194	14831
20°	12597	13071	13936
25°	11299	11915	12984
30°	10103	10763	11996
35°	8835	9473	10827
40°	7436	8026	9374
45°	6136	6666	7826
50°	5124	5585	6519
55°	4349	4793	5384
60°	3718	4155	4298
65°	2960	3495	2777
70°	2625	2727	1694
75°	2431	2210	1037
80°	2237	2035	898
85°	2022	1863	730



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	3.5
10°-20°	416.5	9.0
20°-30°	539.5	11.7
30°-40°	528.3	11.4
40°-50°	404.4	8.7
50°-60°	269.4	5.8
60°-70°	147.0	3.2
70°-80°	61.3	1.3
80°-90°	17.3	0.4
90°-100°	165.9	3.6
100°-110°	400.9	8.7
110°-120°	427.6	9.2
120°-130°	346.3	7.5
130°-140°	268.1	5.8
140°-150°	204.5	4.4
150°-160°	148.0	3.2
160°-170°	91.2	2.0
170°-180°	30.9	0.7
0°-30°	1116.1	24.1
0°-40°	1644.3	35.5
0°-60°	2318.2	50.1
0°-90°	2543.8	55.0
90°-120°	994.3	21.5
90°-150°	1813.2	39.2
90°-180°	2083.0	45.0
0°-180°	4627.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1746	1746	1746	1746	1746	
5°	1717	1700	1711	1715	1721	160
15°	1452	1447	1486	1526	1553	406
25°	1110	1113	1170	1222	1275	510
35°	784	788	841	898	961	488
45°	470	479	511	550	600	367
55°	270	282	298	309	335	245
65°	136	147	160	140	127	141
75°	68	68	62	43	29	73
85°	19	19	18	11	7	21
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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1745.7	1745.7	1745.7	1745.7	1745.7
2.5°	1750.0	1734.4	1738.3	1738.2	1733.4
5°	1717.4	1700.1	1711.2	1715.2	1721.2
7.5°	1653.6	1640.6	1660.8	1675.8	1687.9
10°	1604.0	1592.8	1618.5	1640.4	1656.1
12.5°	1546.4	1537.0	1568.9	1598.2	1618.7
15°	1452.3	1447.1	1486.0	1526.5	1552.7
17.5°	1351.7	1349.1	1393.8	1441.0	1474.5
20°	1283.0	1282.3	1331.3	1380.4	1419.4
22.5°	1213.8	1215.4	1267.0	1318.1	1362.4
25°	1109.9	1112.9	1170.4	1221.5	1275.4
27.5°	1013.9	1015.2	1074.7	1128.5	1186.1
30°	948.3	952.0	1010.3	1066.1	1126.0
32.5°	882.7	887.1	944.2	1001.8	1062.9
35°	784.4	788.1	841.1	897.7	961.3
37.5°	683.0	688.1	735.0	788.6	851.2
40°	617.4	624.9	666.4	716.8	778.3
42.5°	554.3	563.6	602.1	649.9	705.3
45°	470.3	479.3	510.9	549.6	599.8
47.5°	398.0	408.3	432.6	465.9	508.8
50°	357.0	366.7	389.1	413.8	454.2
52.5°	320.8	330.5	350.5	369.5	404.0
55°	270.4	281.6	298.0	309.3	334.7
57.5°	229.0	239.8	252.8	257.9	273.3
60°	201.5	213.4	225.2	224.6	232.9
62.5°	176.3	186.5	198.2	190.1	190.6
65°	135.6	146.8	160.1	139.9	127.2
67.5°	109.5	111.9	125.6	97.6	82.4
70°	97.3	97.3	101.1	75.5	62.8
72.5°	85.6	85.6	82.1	61.4	48.1
75°	68.2	68.2	62.0	42.6	29.1
77.5°	52.5	51.9	47.5	31.8	21.1
80°	42.1	42.1	38.3	25.1	16.9
82.5°	32.9	32.9	29.7	19.6	12.6
85°	19.1	19.1	17.6	11.4	6.9
87.5°	6.7	6.7	6.1	3.7	3.1
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)