

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: P519120

Luminaire Tested: **SQ4-WB-050U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519120
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-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

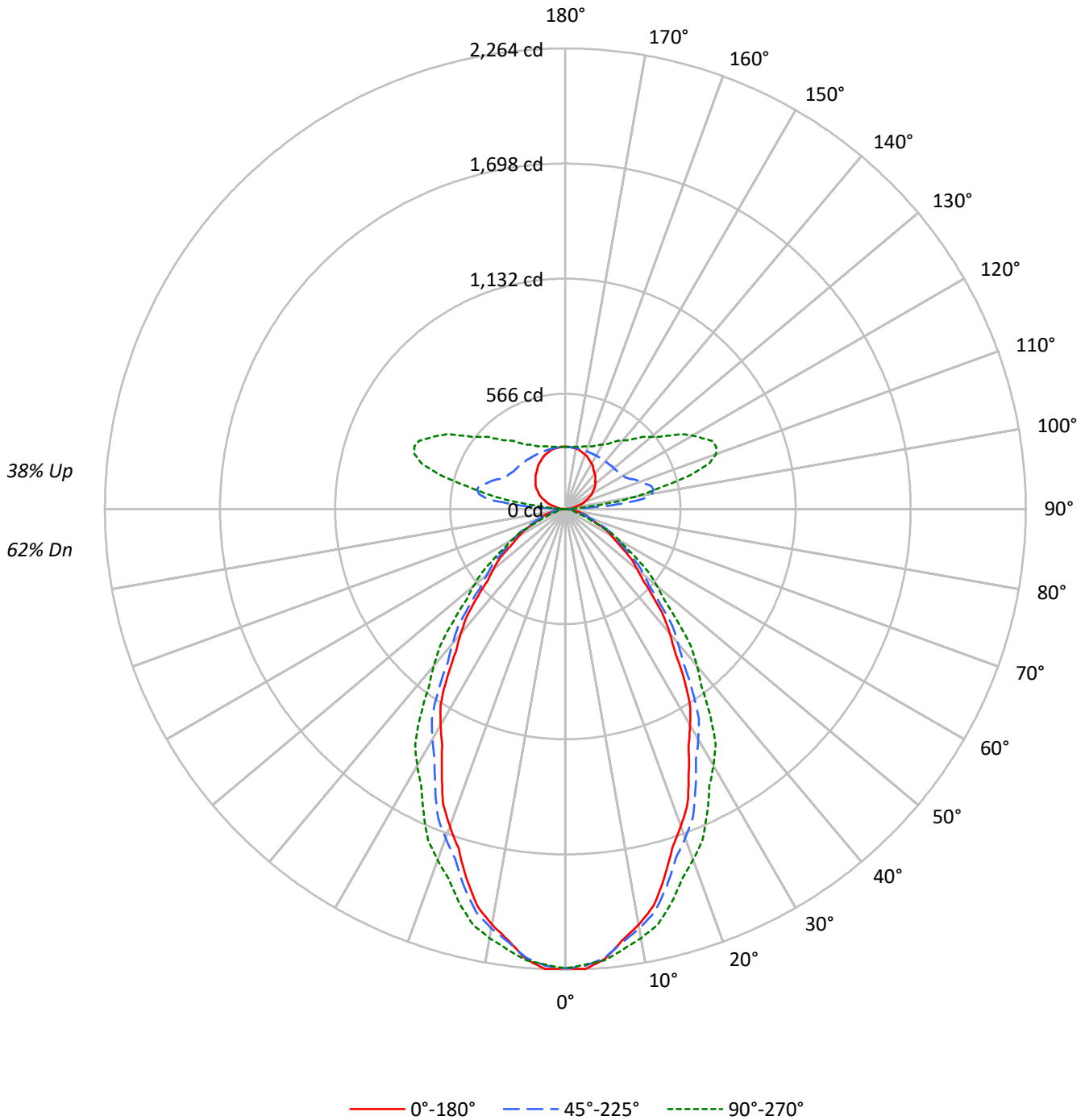
Lumens per Lamp: N/A
Luminaire Lumens: 5283.5 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.1
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20068
15°	17944	18360	19184
20°	16294	16907	18026
25°	14615	15413	16794
30°	13068	13923	15517
35°	11428	12253	14006
40°	9618	10382	12125
45°	7938	8623	10122
50°	6627	7224	8433
55°	5627	6199	6965
60°	4809	5375	5558
65°	3829	4521	3591
70°	3394	3528	2190
75°	3144	2862	1344
80°	2896	2630	1158
85°	2625	2414	942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.1	3.9
10°-20°	538.7	10.2
20°-30°	697.8	13.2
30°-40°	683.3	12.9
40°-50°	523.0	9.9
50°-60°	348.5	6.6
60°-70°	190.2	3.6
70°-80°	79.3	1.5
80°-90°	23.6	0.4
90°-100°	146.4	2.8
100°-110°	397.8	7.5
110°-120°	409.0	7.7
120°-130°	327.0	6.2
130°-140°	257.0	4.9
140°-150°	197.0	3.7
150°-160°	141.7	2.7
160°-170°	86.7	1.6
170°-180°	29.2	0.6
0°-30°	1443.6	27.3
0°-40°	2127.0	40.3
0°-60°	2998.5	56.8
0°-90°	3291.6	62.3
90°-120°	953.3	18.0
90°-150°	1734.4	32.8
90°-180°	1992.0	37.7
0°-180°	5283.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2258	2258	2258	2258	2258	
5°	2221	2199	2214	2219	2226	207
15°	1879	1872	1922	1974	2008	525
25°	1436	1440	1514	1580	1650	660
35°	1015	1019	1088	1161	1244	631
45°	608	620	661	711	776	474
55°	350	364	385	400	433	317
65°	175	190	207	181	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	1	4	7	9	9	3
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2258.0	2258.0	2258.0	2258.0	2258.0
2.5°	2263.6	2243.4	2248.5	2248.4	2242.2
5°	2221.4	2199.1	2213.5	2218.6	2226.3
7.5°	2139.0	2122.1	2148.3	2167.6	2183.3
10°	2074.7	2060.2	2093.6	2121.8	2142.1
12.5°	2000.2	1988.0	2029.4	2067.2	2093.8
15°	1878.6	1871.8	1922.2	1974.5	2008.4
17.5°	1748.4	1745.1	1802.9	1863.9	1907.3
20°	1659.6	1658.6	1722.0	1785.6	1836.0
22.5°	1570.0	1572.2	1638.8	1704.9	1762.2
25°	1435.7	1439.6	1514.0	1579.9	1649.7
27.5°	1311.4	1313.2	1390.1	1459.8	1534.2
30°	1226.6	1231.5	1306.9	1379.0	1456.5
32.5°	1141.8	1147.4	1221.3	1295.8	1374.8
35°	1014.6	1019.4	1087.9	1161.1	1243.5
37.5°	883.4	890.0	950.8	1020.0	1101.0
40°	798.6	808.3	862.0	927.2	1006.7
42.5°	716.9	729.0	778.8	840.6	912.3
45°	608.4	620.0	660.9	710.9	775.8
47.5°	514.8	528.2	559.6	602.7	658.1
50°	461.7	474.3	503.3	535.2	587.5
52.5°	414.9	427.5	453.4	478.0	522.6
55°	349.8	364.3	385.4	400.0	433.0
57.5°	296.3	310.2	327.0	333.6	353.5
60°	260.6	276.1	291.3	290.5	301.2
62.5°	228.1	241.3	256.4	245.9	246.5
65°	175.4	189.9	207.1	180.9	164.5
67.5°	141.7	144.8	162.5	126.2	106.6
70°	125.8	125.8	130.8	97.7	81.2
72.5°	110.8	110.8	106.2	79.5	62.2
75°	88.2	88.2	80.3	55.1	37.7
77.5°	68.0	67.2	61.4	41.1	27.3
80°	54.5	54.5	49.5	32.5	21.8
82.5°	42.6	42.6	38.4	25.4	16.2
85°	24.8	24.8	22.8	14.7	8.9
87.5°	8.9	9.5	9.3	6.5	5.7
90°	1.0	3.9	6.9	8.8	8.8
92.5°	8.8	40.1	69.6	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.5	391.0	304.2	213.7
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.5	99.6	443.6	542.3	467.9
105°	70.6	110.0	437.5	666.1	626.8
107.5°	87.3	122.0	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.7	789.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.5	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.6	334.7	646.4	755.5
120°	151.1	176.0	327.6	612.6	721.0
122.5°	159.7	184.6	322.9	578.8	683.3
125°	172.6	196.6	316.8	533.9	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	311.9	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	208.0	231.0	308.0	434.8	490.5
137.5°	218.4	239.3	306.8	412.5	459.3
140°	224.6	244.8	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.5	303.1	347.6	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.8	333.1
160°	284.5	291.2	302.1	321.9	327.6
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.8
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.1	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.0	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.6	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)