

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: P563998

Luminaire Tested: **SQ4-PR1-050U-100D-835-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563998
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-050U-100D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

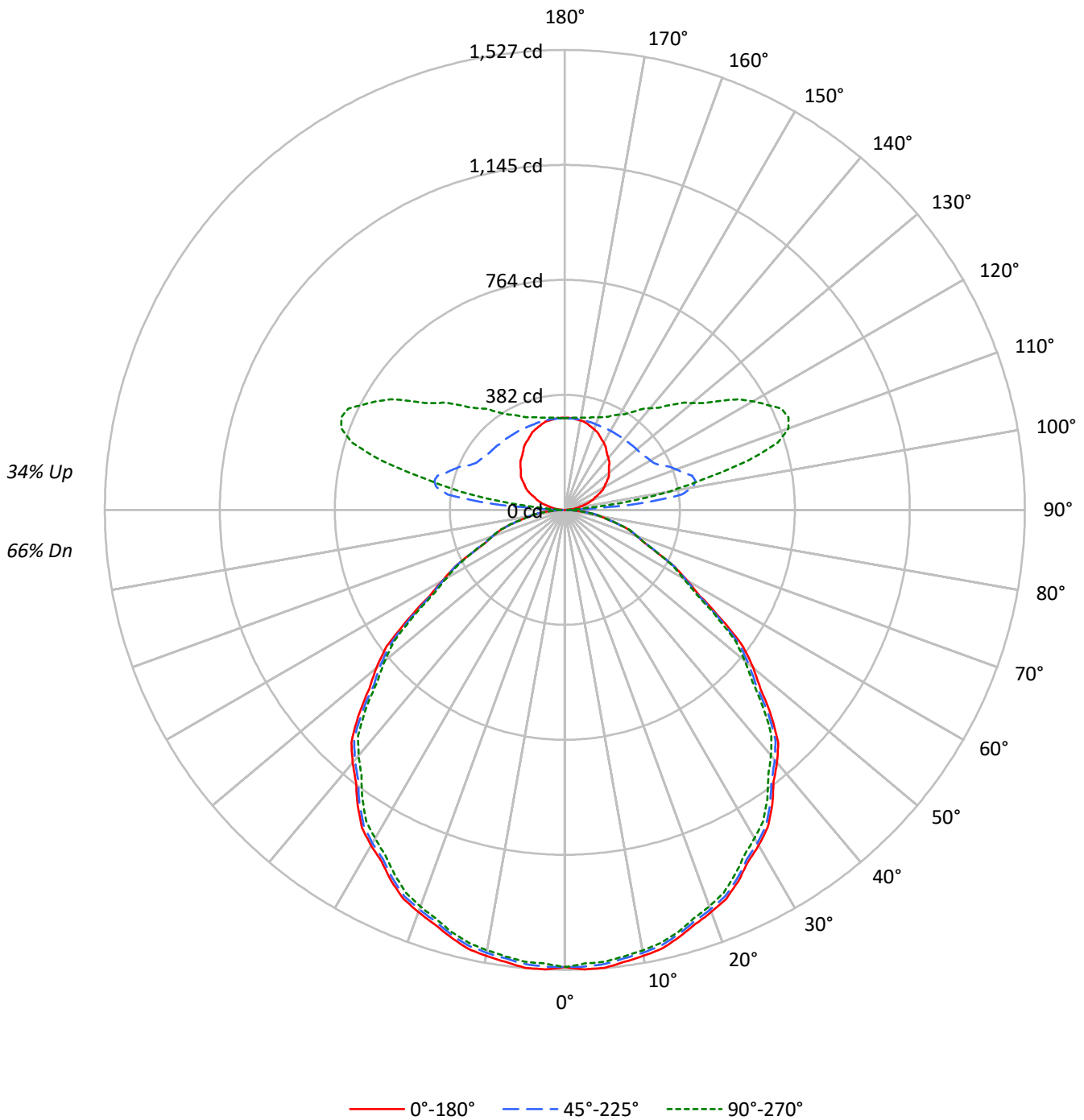
Lumens per Lamp: N/A
Luminaire Lumens: 5788.0 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14005	14005	14005
5°	14132	14023	13951
10°	14087	13989	13915
15°	14025	13938	13863
20°	13955	13864	13762
25°	13856	13763	13604
30°	13707	13610	13414
35°	13504	13386	13195
40°	13197	13054	12818
45°	12659	12437	12181
50°	11711	11430	11204
55°	10222	9991	9780
60°	8614	8542	8372
65°	7451	7479	7423
70°	6844	6879	6879
75°	6573	6573	6620
80°	6185	6254	6185
85°	4986	5536	5536



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.6	2.5
10°-20°	410.7	7.1
20°-30°	619.5	10.7
30°-40°	738.1	12.8
40°-50°	727.7	12.6
50°-60°	556.2	9.6
60°-70°	344.2	5.9
70°-80°	195.5	3.4
80°-90°	60.7	1.0
90°-100°	146.4	2.5
100°-110°	397.8	6.9
110°-120°	409.0	7.1
120°-130°	327.0	5.7
130°-140°	257.0	4.4
140°-150°	197.0	3.4
150°-160°	141.7	2.4
160°-170°	86.7	1.5
170°-180°	29.2	0.5
0°-30°	1173.8	20.3
0°-40°	1911.9	33.0
0°-60°	3195.8	55.2
0°-90°	3796.1	65.6
90°-120°	953.3	16.5
90°-150°	1734.4	30.0
90°-180°	1992.0	34.4
0°-180°	5788.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1526	1509	1514	1509	1506	145
15°	1468	1453	1459	1454	1451	414
25°	1361	1344	1352	1338	1336	626
35°	1199	1185	1188	1173	1172	748
45°	970	957	953	936	934	743
55°	636	625	621	611	608	569
65°	341	339	343	340	340	346
75°	184	184	184	186	186	195
85°	47	50	52	52	52	55
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°	1518.0	1518.0	1518.0	1518.0	1518.0
2.5°	1527.4	1514.2	1518.0	1514.7	1507.6
5°	1525.9	1509.3	1514.1	1508.8	1506.3
7.5°	1514.1	1497.7	1502.6	1497.3	1495.8
10°	1503.7	1488.3	1493.2	1487.9	1485.3
12.5°	1492.1	1475.8	1481.7	1475.4	1472.8
15°	1468.3	1453.0	1459.2	1453.9	1451.4
17.5°	1442.2	1425.8	1432.0	1425.9	1422.6
20°	1421.3	1405.9	1412.1	1402.9	1401.7
22.5°	1398.3	1382.9	1389.1	1376.8	1376.6
25°	1361.1	1344.5	1352.0	1337.6	1336.3
27.5°	1316.9	1301.6	1307.8	1293.1	1291.6
30°	1286.6	1271.3	1277.5	1261.7	1259.1
32.5°	1252.1	1237.8	1242.9	1227.2	1225.7
35°	1199.0	1184.9	1188.5	1172.8	1171.5
37.5°	1138.6	1125.8	1127.9	1110.6	1109.3
40°	1095.7	1082.9	1083.9	1065.6	1064.3
42.5°	1048.6	1035.8	1034.8	1016.4	1015.2
45°	970.2	957.4	953.2	936.1	933.6
47.5°	880.7	868.0	860.1	846.2	844.4
50°	815.9	803.1	796.3	784.4	780.6
52.5°	745.8	733.0	727.2	716.4	712.6
55°	635.5	625.2	621.1	610.6	608.0
57.5°	530.6	523.7	522.5	512.3	511.2
60°	466.8	463.0	462.9	453.7	453.7
62.5°	412.4	409.6	411.6	405.6	404.5
65°	341.3	338.7	342.6	340.0	340.0
67.5°	285.0	285.0	287.4	286.3	286.3
70°	253.7	253.7	255.0	255.0	255.0
72.5°	225.4	224.4	227.8	227.7	226.7
75°	184.4	184.4	184.4	185.7	185.7
77.5°	143.6	143.8	144.9	144.6	143.6
80°	116.4	117.6	117.7	116.4	116.4
82.5°	89.2	90.5	90.5	90.2	89.2
85°	47.1	49.6	52.3	52.3	52.3
87.5°	13.8	18.5	22.3	22.7	21.6
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)