

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: P563993

Luminaire Tested: **SQ4-PR1-050U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563993
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-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 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: 16389.8 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

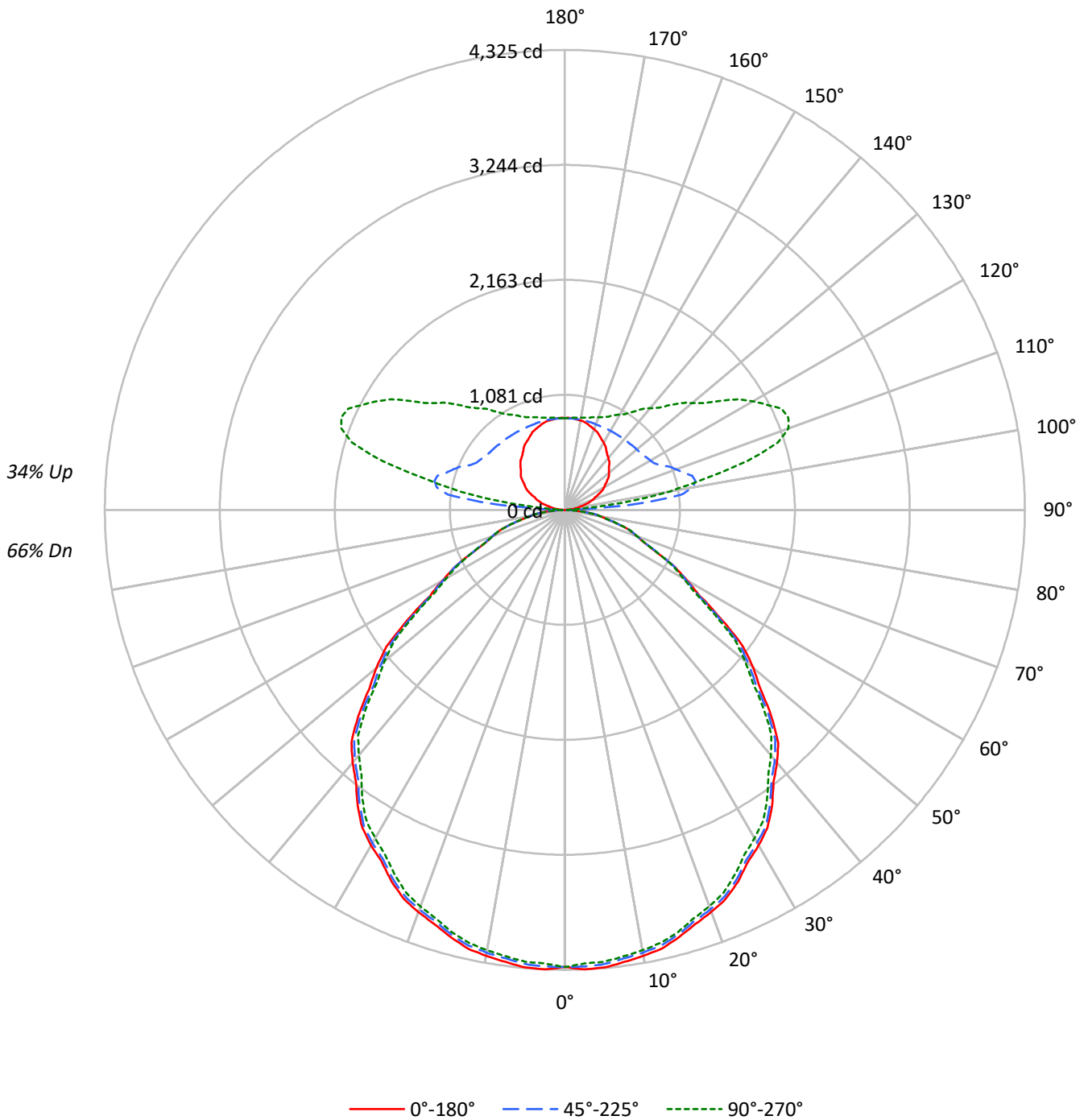
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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			
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°	13220	13220	13220
5°	13339	13236	13168
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12323	12099
45°	11948	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7903
65°	7032	7059	7005
70°	6459	6492	6492
75°	6204	6204	6248
80°	5836	5901	5836
85°	4704	5226	5226



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.5	2.5
10°-20°	1163.0	7.1
20°-30°	1754.2	10.7
30°-40°	2090.1	12.8
40°-50°	2060.7	12.6
50°-60°	1574.9	9.6
60°-70°	974.6	5.9
70°-80°	553.6	3.4
80°-90°	171.7	1.0
90°-100°	414.7	2.5
100°-110°	1126.6	6.9
110°-120°	1158.3	7.1
120°-130°	926.1	5.7
130°-140°	727.6	4.4
140°-150°	557.9	3.4
150°-160°	401.2	2.4
160°-170°	245.4	1.5
170°-180°	82.7	0.5
0°-30°	3323.7	20.3
0°-40°	5413.9	33.0
0°-60°	9049.4	55.2
0°-90°	10749.3	65.6
90°-120°	2699.5	16.5
90°-150°	4911.2	30.0
90°-180°	5640.0	34.4
0°-180°	16389.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4299	4299	4299	4299	4299	
5°	4321	4274	4288	4272	4265	410
15°	4158	4114	4132	4117	4110	1173
25°	3854	3807	3828	3788	3784	1774
35°	3395	3355	3366	3321	3317	2119
45°	2747	2711	2699	2651	2644	2105
55°	1799	1770	1759	1729	1722	1612
65°	966	959	970	963	963	979
75°	522	522	522	526	526	551
85°	133	140	148	148	148	155
90°	3	11	19	25	25	10
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4298.6	4298.6	4298.6	4298.6	4298.6
2.5°	4325.2	4287.6	4298.6	4289.2	4269.0
5°	4320.8	4273.7	4287.5	4272.5	4265.3
7.5°	4287.5	4241.1	4254.9	4240.0	4235.6
10°	4257.9	4214.4	4228.2	4213.3	4206.0
12.5°	4225.3	4178.9	4195.7	4177.7	4170.5
15°	4157.9	4114.4	4132.0	4117.0	4109.8
17.5°	4083.8	4037.5	4055.0	4037.7	4028.3
20°	4024.6	3981.2	3998.7	3972.7	3969.1
22.5°	3959.4	3916.0	3933.5	3898.7	3898.0
25°	3854.3	3807.2	3828.4	3787.6	3783.9
27.5°	3729.1	3685.7	3703.2	3661.7	3657.3
30°	3643.2	3599.8	3617.3	3572.7	3565.5
32.5°	3545.5	3505.0	3519.6	3475.1	3470.7
35°	3395.2	3355.4	3365.6	3321.0	3317.4
37.5°	3224.1	3187.9	3193.8	3144.8	3141.2
40°	3102.7	3066.5	3069.4	3017.4	3013.8
42.5°	2969.4	2933.2	2930.1	2878.2	2874.6
45°	2747.2	2711.0	2699.1	2650.8	2643.6
47.5°	2494.0	2457.8	2435.5	2396.1	2391.1
50°	2310.3	2274.1	2254.8	2221.2	2210.4
52.5°	2111.9	2075.7	2059.3	2028.7	2017.9
55°	1799.4	1770.4	1758.7	1728.9	1721.7
57.5°	1502.5	1482.9	1479.5	1450.6	1447.7
60°	1321.8	1310.9	1310.7	1284.8	1284.8
62.5°	1167.8	1159.8	1165.5	1148.4	1145.5
65°	966.3	959.1	970.1	962.6	962.6
67.5°	807.1	807.1	813.8	810.8	810.8
70°	718.3	718.3	722.0	722.0	722.0
72.5°	638.3	635.4	645.0	644.9	642.0
75°	522.1	522.1	522.1	525.8	525.8
77.5°	406.5	407.3	410.2	409.4	406.5
80°	329.5	333.1	333.2	329.5	329.5
82.5°	252.5	256.1	256.2	255.4	252.5
85°	133.3	140.5	148.1	148.1	148.1
87.5°	39.1	52.3	63.1	64.2	61.3
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

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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)