

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: P564256

Luminaire Tested: **SQ4-PR1-100U-050D-940-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564256
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PR1-100U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

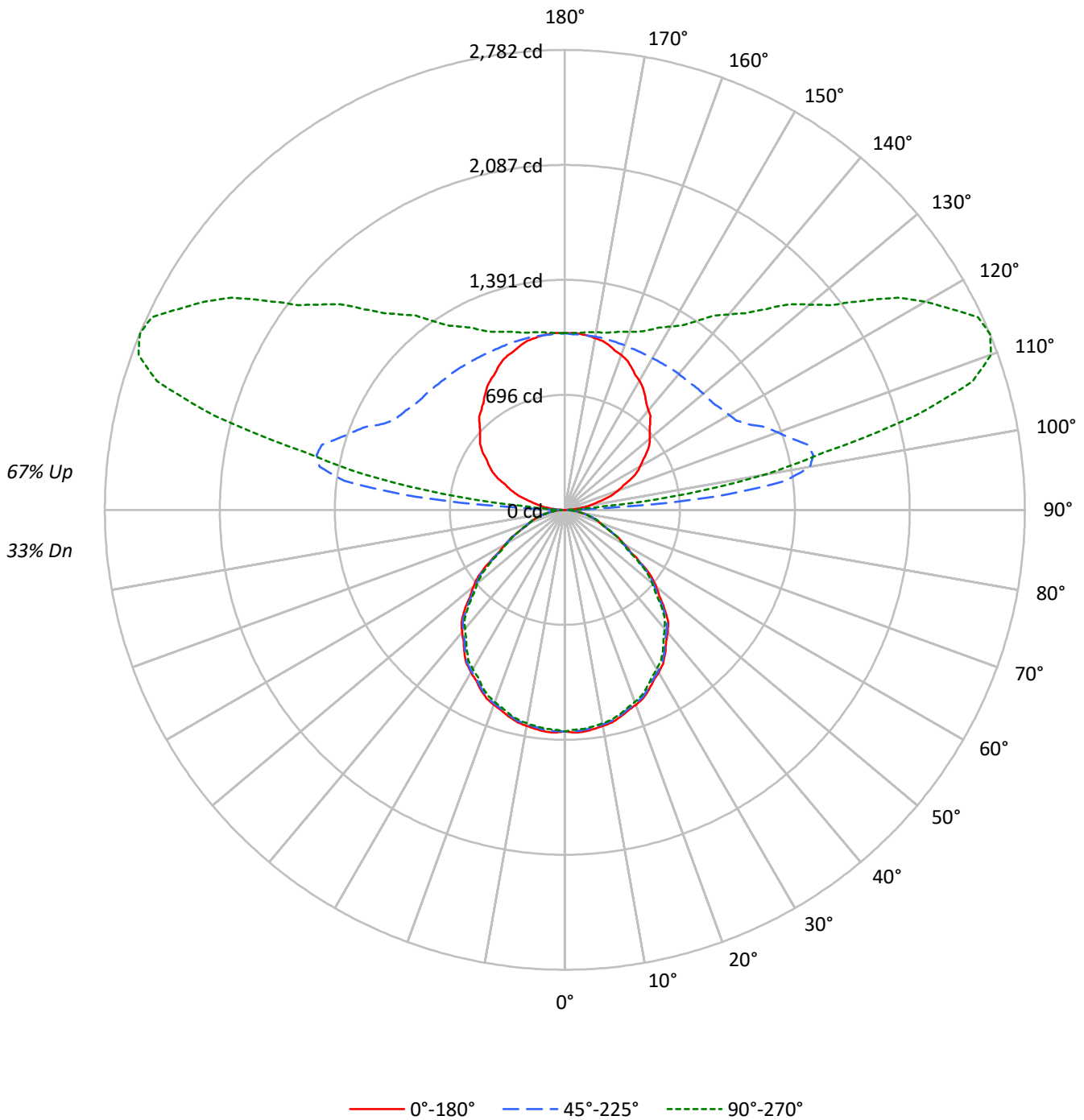
Lumens per Lamp: N/A
Luminaire Lumens: 10296.7 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6182	6182	6182
5°	6238	6190	6158
10°	6218	6175	6143
15°	6191	6153	6119
20°	6160	6120	6075
25°	6117	6075	6005
30°	6051	6008	5922
35°	5962	5909	5825
40°	5826	5763	5659
45°	5588	5490	5377
50°	5169	5045	4946
55°	4512	4410	4317
60°	3802	3770	3696
65°	3289	3301	3276
70°	3020	3036	3036
75°	2902	2902	2921
80°	2728	2760	2728
85°	2202	2445	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.7	1.2
10°-20°	362.6	3.5
20°-30°	546.9	5.3
30°-40°	651.7	6.3
40°-50°	642.5	6.2
50°-60°	491.0	4.8
60°-70°	303.9	3.0
70°-80°	172.6	1.7
80°-90°	54.7	0.5
90°-100°	500.5	4.9
100°-110°	1381.7	13.4
110°-120°	1425.0	13.8
120°-130°	1145.1	11.1
130°-140°	899.9	8.7
140°-150°	690.2	6.7
150°-160°	496.0	4.8
160°-170°	303.4	2.9
170°-180°	102.3	1.0
0°-30°	1036.3	10.1
0°-40°	1687.9	16.4
0°-60°	2821.5	27.4
0°-90°	3352.6	32.6
90°-120°	3307.2	32.1
90°-150°	6042.4	58.7
90°-180°	6944.0	67.4
0°-180°	10296.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1347	1332	1337	1332	1330	128
15°	1296	1283	1288	1284	1281	366
25°	1202	1187	1194	1181	1180	553
35°	1059	1046	1049	1035	1034	661
45°	856	845	842	826	824	656
55°	561	552	548	539	537	503
65°	301	299	302	300	300	305
75°	163	163	163	164	164	172
85°	42	44	46	46	46	48
90°	3	7	14	15	17	7
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.2	1340.2	1340.2	1340.2	1340.2
2.5°	1348.5	1336.8	1340.2	1337.3	1331.0
5°	1347.1	1332.5	1336.8	1332.1	1329.8
7.5°	1336.8	1322.3	1326.6	1321.9	1320.6
10°	1327.5	1314.0	1318.3	1313.6	1311.4
12.5°	1317.4	1302.9	1308.1	1302.5	1300.3
15°	1296.4	1282.8	1288.3	1283.6	1281.3
17.5°	1273.3	1258.8	1264.3	1258.9	1256.0
20°	1254.8	1241.3	1246.7	1238.6	1237.5
22.5°	1234.5	1220.9	1226.4	1215.5	1215.3
25°	1201.7	1187.0	1193.6	1180.9	1179.8
27.5°	1162.7	1149.1	1154.6	1141.6	1140.3
30°	1135.9	1122.4	1127.8	1113.9	1111.7
32.5°	1105.4	1092.8	1097.3	1083.5	1082.1
35°	1058.6	1046.1	1049.3	1035.4	1034.3
37.5°	1005.2	993.9	995.8	980.5	979.4
40°	967.4	956.1	957.0	940.8	939.7
42.5°	925.8	914.5	913.6	897.4	896.2
45°	856.5	845.3	841.5	826.5	824.2
47.5°	777.6	766.3	759.3	747.1	745.5
50°	720.3	709.0	703.0	692.5	689.2
52.5°	658.5	647.2	642.1	632.5	629.1
55°	561.0	552.0	548.3	539.0	536.8
57.5°	468.4	462.3	461.3	452.3	451.4
60°	412.1	408.7	408.6	400.6	400.6
62.5°	364.1	361.6	363.4	358.1	357.2
65°	301.3	299.0	302.4	300.1	300.1
67.5°	251.7	251.7	253.7	252.8	252.8
70°	223.9	223.9	225.1	225.1	225.1
72.5°	199.0	198.1	201.1	201.1	200.2
75°	162.8	162.8	162.8	163.9	163.9
77.5°	126.7	127.0	127.9	127.7	126.7
80°	102.7	103.9	103.9	102.7	102.7
82.5°	78.7	79.9	79.9	79.6	78.7
85°	41.6	43.8	46.2	46.2	46.2
87.5°	12.7	17.0	21.2	21.5	21.0
90°	3.4	6.8	13.7	15.4	17.1
92.5°	30.8	127.8	228.5	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.8
97.5°	121.7	303.3	1345.1	1035.6	750.0
100°	157.3	322.8	1506.5	1517.1	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.2	2320.8	2185.3
107.5°	304.4	423.4	1435.3	2536.0	2585.5
110°	345.4	452.4	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.7	2782.5
115°	441.2	533.1	1224.3	2423.8	2756.5
117.5°	492.5	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.9	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.2
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.5	1087.2	1609.9	1841.6
135°	728.4	807.0	1079.0	1521.2	1715.1
137.5°	766.1	837.6	1074.9	1446.6	1612.2
140°	786.6	856.8	1072.2	1396.9	1542.4
142.5°	809.8	874.7	1069.4	1352.8	1480.8
145°	844.7	903.2	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.3	1322.8
150°	902.9	944.7	1060.2	1217.2	1279.1
152.5°	922.0	961.1	1058.8	1192.3	1243.5
155°	952.5	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.6	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.3	1130.6
165°	1031.1	1044.5	1061.9	1103.1	1111.5
167.5°	1046.8	1054.9	1063.6	1095.1	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.7	1070.4	1063.6	1078.9	1075.6
177.5°	1071.5	1070.1	1063.3	1072.8	1070.1
180°	1068.7	1068.7	1068.7	1068.7	1068.7

(END OF REPORT)