

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: P564239

Luminaire Tested: **SQ4-PR1-100U-050D-835-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564239
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-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

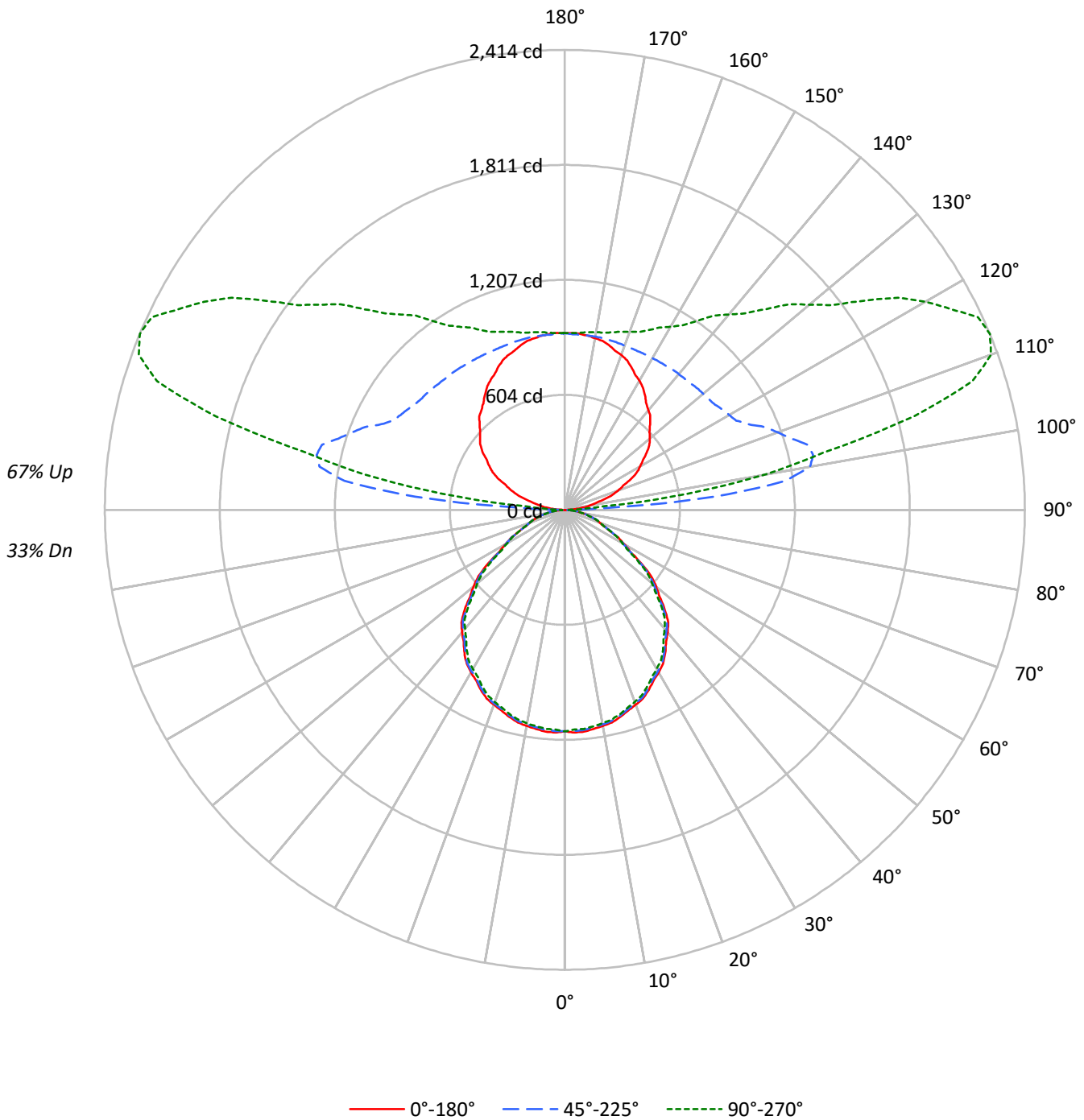
Lumens per Lamp: N/A
Luminaire Lumens: 8933.1 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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°	7152	7152	7152
5°	7216	7160	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7125	7080	7027
25°	7076	7028	6946
30°	6999	6950	6849
35°	6896	6836	6738
40°	6739	6666	6545
45°	6464	6351	6220
50°	5980	5836	5721
55°	5219	5101	4994
60°	4398	4361	4275
65°	3804	3819	3790
70°	3494	3512	3512
75°	3356	3356	3379
80°	3156	3191	3156
85°	2548	2830	2830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.0	1.2
10°-20°	314.6	3.5
20°-30°	474.5	5.3
30°-40°	565.4	6.3
40°-50°	557.4	6.2
50°-60°	426.0	4.8
60°-70°	263.6	3.0
70°-80°	149.7	1.7
80°-90°	47.5	0.5
90°-100°	434.2	4.9
100°-110°	1198.7	13.4
110°-120°	1236.3	13.8
120°-130°	993.5	11.1
130°-140°	780.8	8.7
140°-150°	598.8	6.7
150°-160°	430.4	4.8
160°-170°	263.2	2.9
170°-180°	88.7	1.0
0°-30°	899.0	10.1
0°-40°	1464.4	16.4
0°-60°	2447.8	27.4
0°-90°	2908.6	32.6
90°-120°	2869.2	32.1
90°-150°	5242.2	58.7
90°-180°	6024.0	67.4
0°-180°	8933.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1163	1163	1163	1163	1163	
5°	1169	1156	1160	1156	1154	111
15°	1125	1113	1118	1114	1112	317
25°	1043	1030	1036	1024	1024	480
35°	918	908	910	898	897	573
45°	743	733	730	717	715	569
55°	487	479	476	468	466	436
65°	261	259	262	260	260	265
75°	141	141	141	142	142	149
85°	36	38	40	40	40	42
90°	3	6	12	13	15	6
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.7	1162.7	1162.7	1162.7	1162.7
2.5°	1169.9	1159.8	1162.7	1160.2	1154.7
5°	1168.7	1156.0	1159.7	1155.7	1153.7
7.5°	1159.7	1147.2	1150.9	1146.9	1145.7
10°	1151.7	1140.0	1143.7	1139.7	1137.7
12.5°	1142.9	1130.4	1134.9	1130.0	1128.1
15°	1124.7	1112.9	1117.7	1113.6	1111.7
17.5°	1104.7	1092.1	1096.8	1092.2	1089.6
20°	1088.6	1076.9	1081.6	1074.6	1073.6
22.5°	1071.0	1059.2	1064.0	1054.6	1054.4
25°	1042.6	1029.8	1035.5	1024.5	1023.5
27.5°	1008.7	997.0	1001.7	990.5	989.3
30°	985.5	973.7	978.5	966.4	964.4
32.5°	959.0	948.1	952.0	940.0	938.8
35°	918.4	907.6	910.4	898.3	897.3
37.5°	872.1	862.3	863.9	850.6	849.7
40°	839.3	829.5	830.2	816.2	815.2
42.5°	803.2	793.4	792.6	778.5	777.6
45°	743.1	733.3	730.1	717.0	715.1
47.5°	674.6	664.8	658.8	648.1	646.8
50°	624.9	615.1	609.9	600.8	597.9
52.5°	571.3	561.5	557.0	548.8	545.8
55°	486.7	478.9	475.7	467.7	465.7
57.5°	406.4	401.1	400.2	392.4	391.6
60°	357.5	354.6	354.5	347.5	347.5
62.5°	315.9	313.7	315.3	310.6	309.9
65°	261.4	259.4	262.4	260.4	260.4
67.5°	218.3	218.3	220.1	219.3	219.3
70°	194.3	194.3	195.3	195.3	195.3
72.5°	172.7	171.9	174.5	174.4	173.7
75°	141.2	141.2	141.2	142.2	142.2
77.5°	110.0	110.2	111.0	110.7	110.0
80°	89.1	90.1	90.1	89.1	89.1
82.5°	68.3	69.3	69.3	69.1	68.3
85°	36.1	38.0	40.1	40.1	40.1
87.5°	11.0	14.7	18.4	18.7	18.2
90°	3.0	5.9	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)