

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: P564014

Luminaire Tested: **SQ4-PR1-050U-100D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564014
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

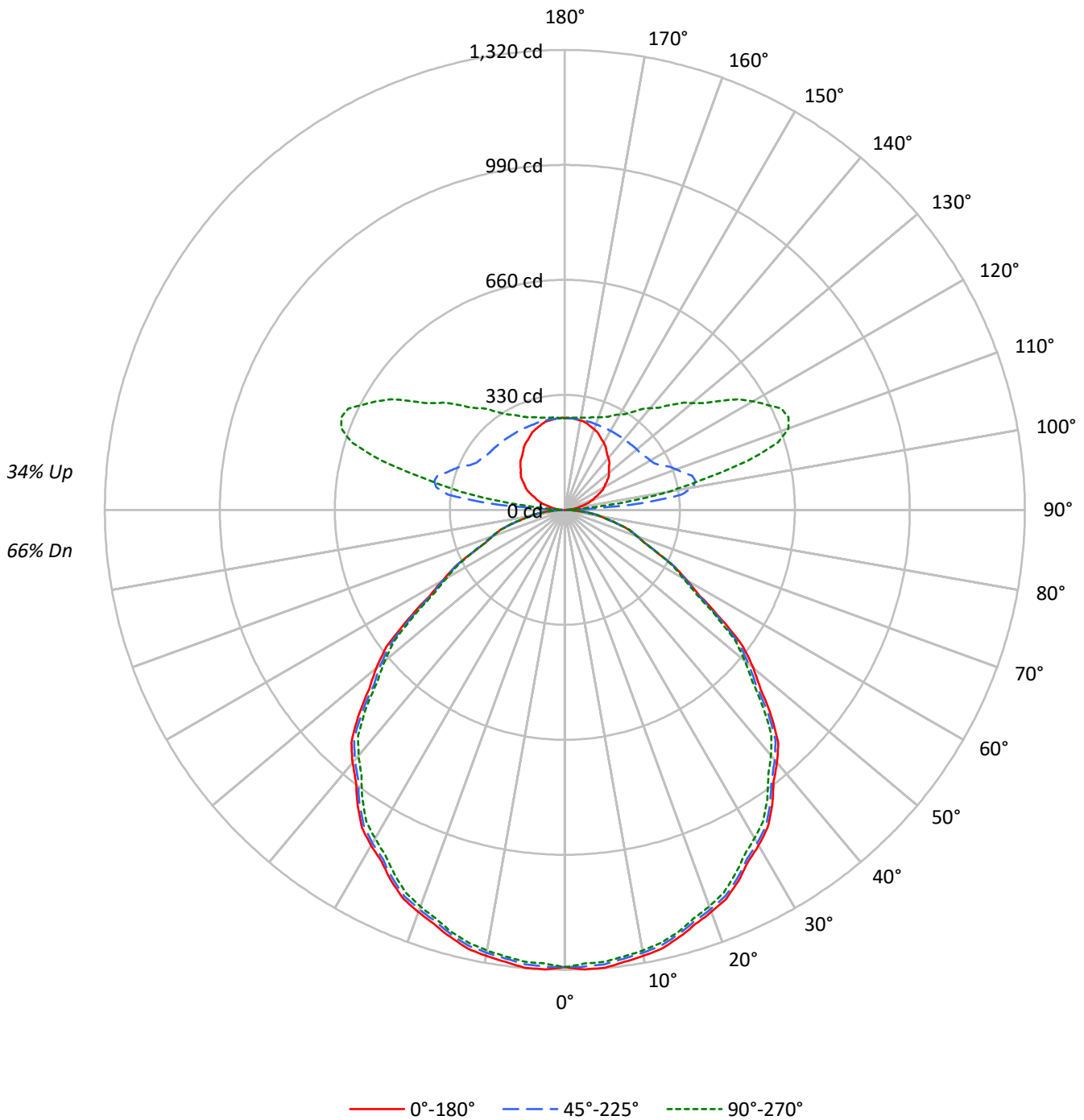
Lumens per Lamp: N/A
Luminaire Lumens: 5003.6 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	12108	12108	12108
5°	12217	12122	12059
10°	12178	12093	12030
15°	12125	12048	11984
20°	12064	11986	11897
25°	11979	11898	11760
30°	11849	11765	11596
35°	11674	11573	11407
40°	11408	11285	11082
45°	10943	10751	10531
50°	10123	9881	9686
55°	8836	8636	8454
60°	7446	7383	7237
65°	6440	6464	6416
70°	5916	5945	5945
75°	5682	5682	5721
80°	5345	5403	5345
85°	4308	4785	4785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	2.5
10°-20°	355.1	7.1
20°-30°	535.5	10.7
30°-40°	638.1	12.8
40°-50°	629.1	12.6
50°-60°	480.8	9.6
60°-70°	297.5	5.9
70°-80°	169.0	3.4
80°-90°	52.4	1.0
90°-100°	126.6	2.5
100°-110°	343.9	6.9
110°-120°	353.6	7.1
120°-130°	282.7	5.7
130°-140°	222.2	4.4
140°-150°	170.3	3.4
150°-160°	122.5	2.4
160°-170°	74.9	1.5
170°-180°	25.2	0.5
0°-30°	1014.7	20.3
0°-40°	1652.8	33.0
0°-60°	2762.7	55.2
0°-90°	3281.6	65.6
90°-120°	824.1	16.5
90°-150°	1499.3	30.0
90°-180°	1722.0	34.4
0°-180°	5003.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1319	1305	1309	1304	1302	125
15°	1269	1256	1261	1257	1255	358
25°	1177	1162	1169	1156	1155	542
35°	1036	1024	1028	1014	1013	647
45°	839	828	824	809	807	643
55°	549	540	537	528	526	492
65°	295	293	296	294	294	299
75°	159	159	159	160	160	168
85°	41	43	45	45	45	47
90°	1	3	6	8	8	3
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	343	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1312.3	1312.3	1312.3	1312.3	1312.3
2.5°	1320.4	1309.0	1312.3	1309.5	1303.3
5°	1319.1	1304.7	1308.9	1304.3	1302.1
7.5°	1308.9	1294.8	1299.0	1294.4	1293.1
10°	1299.9	1286.6	1290.8	1286.3	1284.1
12.5°	1289.9	1275.8	1280.9	1275.4	1273.2
15°	1269.4	1256.1	1261.4	1256.9	1254.7
17.5°	1246.8	1232.6	1237.9	1232.7	1229.8
20°	1228.7	1215.4	1220.8	1212.8	1211.7
22.5°	1208.8	1195.5	1200.9	1190.2	1190.0
25°	1176.7	1162.3	1168.8	1156.3	1155.2
27.5°	1138.5	1125.2	1130.6	1117.9	1116.5
30°	1112.2	1099.0	1104.3	1090.7	1088.5
32.5°	1082.4	1070.0	1074.5	1060.9	1059.6
35°	1036.5	1024.4	1027.5	1013.9	1012.8
37.5°	984.3	973.2	975.0	960.1	959.0
40°	947.2	936.2	937.0	921.2	920.1
42.5°	906.5	895.5	894.5	878.7	877.6
45°	838.7	827.7	824.0	809.3	807.1
47.5°	761.4	750.3	743.5	731.5	730.0
50°	705.3	694.3	688.4	678.1	674.8
52.5°	644.7	633.7	628.7	619.3	616.0
55°	549.3	540.5	536.9	527.8	525.6
57.5°	458.7	452.7	451.7	442.8	442.0
60°	403.5	400.2	400.1	392.2	392.2
62.5°	356.5	354.1	355.8	350.6	349.7
65°	295.0	292.8	296.1	293.9	293.9
67.5°	246.4	246.4	248.4	247.5	247.5
70°	219.3	219.3	220.4	220.4	220.4
72.5°	194.9	194.0	196.9	196.9	196.0
75°	159.4	159.4	159.4	160.5	160.5
77.5°	124.1	124.3	125.2	125.0	124.1
80°	100.6	101.7	101.7	100.6	100.6
82.5°	77.1	78.2	78.2	78.0	77.1
85°	40.7	42.9	45.2	45.2	45.2
87.5°	11.9	16.0	19.3	19.6	18.7
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)