

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: P564682

Luminaire Tested: **SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564682
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

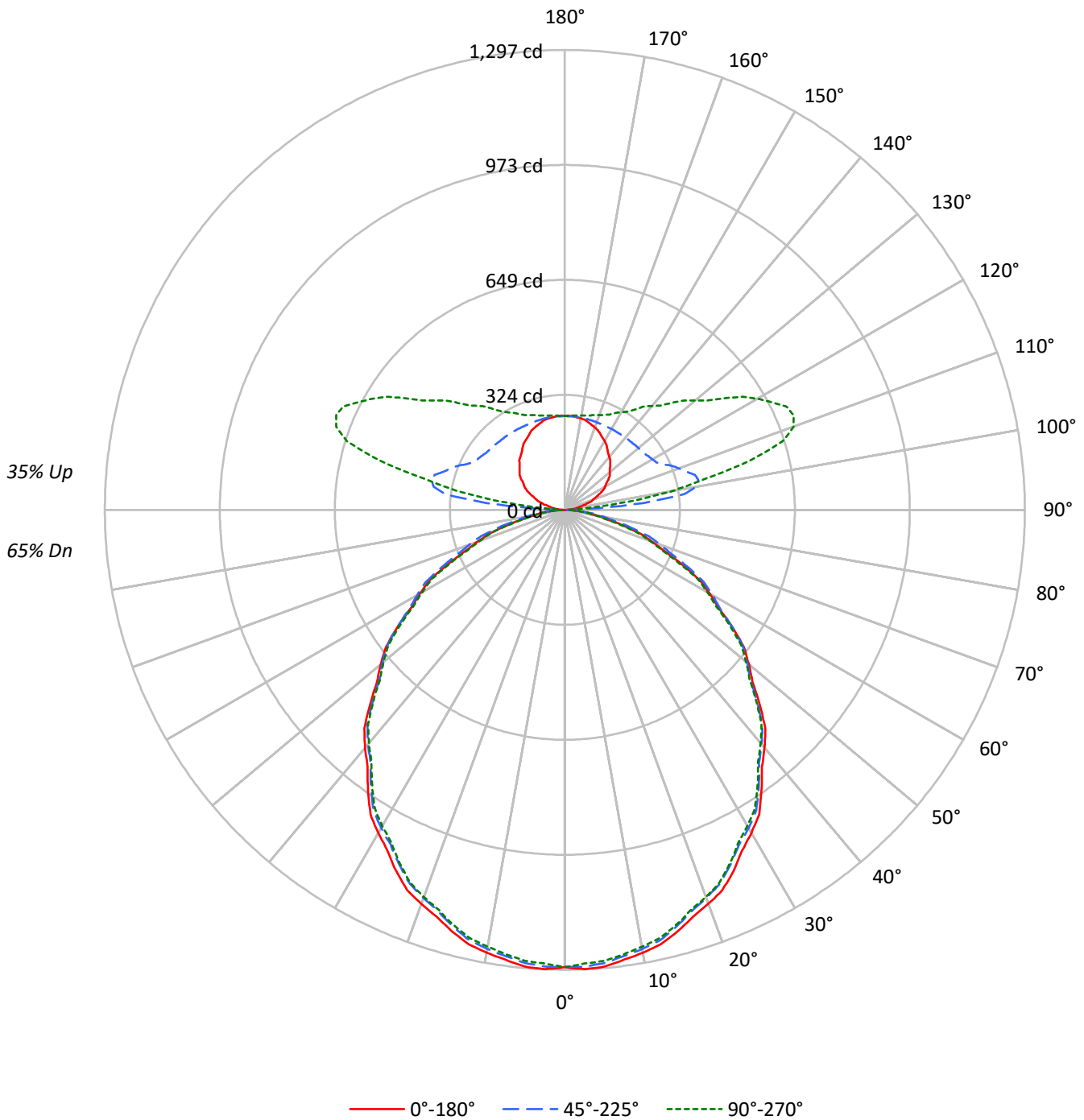
Lumens per Lamp: N/A
Luminaire Lumens: 5012.5 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



TEST NUMBER: P564682
CATALOG NUMBER: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P564682

CATALOG NUMBER: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4

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	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11897	11897	11897
5°	11974	11880	11827
10°	11878	11783	11718
15°	11752	11622	11579
20°	11612	11433	11411
25°	11449	11242	11207
30°	11207	11038	10966
35°	10889	10736	10672
40°	10549	10385	10345
45°	10139	10006	9962
50°	9719	9637	9572
55°	9265	9265	9119
60°	8700	8868	8553
65°	7962	8359	7763
70°	7019	7693	6836
75°	5992	6883	5832
80°	4649	5797	4707
85°	3006	4446	3970



TEST NUMBER: P564682

CATALOG NUMBER: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	2.4
10°-20°	342.8	6.8
20°-30°	508.5	10.1
30°-40°	595.0	11.9
40°-50°	592.3	11.8
50°-60°	511.5	10.2
60°-70°	368.2	7.3
70°-80°	193.1	3.9
80°-90°	48.9	1.0
90°-100°	127.2	2.5
100°-110°	345.7	6.9
110°-120°	355.4	7.1
120°-130°	284.2	5.7
130°-140°	223.3	4.5
140°-150°	171.2	3.4
150°-160°	123.1	2.5
160°-170°	75.3	1.5
170°-180°	25.4	0.5
0°-30°	972.7	19.4
0°-40°	1567.7	31.3
0°-60°	2671.6	53.3
0°-90°	3281.8	65.5
90°-120°	828.3	16.5
90°-150°	1507.0	30.1
90°-180°	1731.0	34.5
0°-180°	5012.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1293	1278	1283	1279	1277	122
15°	1230	1215	1217	1214	1212	347
25°	1125	1106	1104	1098	1101	517
35°	967	954	953	944	948	604
45°	777	770	767	765	764	600
55°	576	575	576	568	567	514
65°	365	376	383	368	356	361
75°	168	184	193	180	164	180
85°	28	37	42	40	38	37
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	

TEST NUMBER: P564682

CATALOG NUMBER: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1289.5	1289.5	1289.5	1289.5	1289.5
2.5°	1296.7	1286.1	1289.5	1286.6	1280.4
5°	1292.9	1278.4	1282.7	1279.2	1277.0
7.5°	1279.7	1266.4	1269.5	1265.8	1264.5
10°	1267.9	1254.6	1257.7	1253.1	1250.8
12.5°	1254.3	1240.0	1243.1	1238.5	1237.2
15°	1230.4	1214.8	1216.8	1214.4	1212.2
17.5°	1202.7	1186.9	1187.2	1183.6	1183.1
20°	1182.7	1166.0	1164.5	1160.0	1162.2
22.5°	1160.9	1143.3	1141.8	1135.5	1138.6
25°	1124.7	1105.9	1104.3	1097.5	1100.9
27.5°	1082.9	1064.3	1064.3	1054.8	1058.4
30°	1052.0	1034.3	1036.1	1024.9	1029.3
32.5°	1019.3	1003.3	1004.3	993.1	997.5
35°	966.8	953.5	953.2	944.2	947.5
37.5°	913.2	901.4	899.6	894.4	895.2
40°	875.9	865.9	862.3	858.9	858.9
42.5°	836.9	827.7	824.1	821.6	820.7
45°	777.1	770.4	766.9	764.6	763.5
47.5°	718.0	711.8	708.7	707.1	706.0
50°	677.1	672.7	671.4	668.0	666.9
52.5°	636.2	633.6	632.4	628.0	626.9
55°	576.0	574.9	576.0	568.0	566.9
57.5°	513.3	515.1	518.7	508.0	505.3
60°	471.5	475.9	480.6	468.0	463.5
62.5°	428.8	435.9	442.4	427.9	421.7
65°	364.7	375.8	382.9	367.8	355.6
67.5°	302.9	316.7	325.2	308.9	295.2
70°	260.2	275.7	285.2	268.9	253.4
72.5°	222.9	240.2	247.9	232.5	217.0
75°	168.1	183.7	193.1	180.3	163.6
77.5°	119.3	134.0	141.8	130.6	116.8
80°	87.5	103.0	109.1	99.7	88.6
82.5°	62.0	74.9	79.1	73.4	65.9
85°	28.4	37.3	42.0	39.7	37.5
87.5°	7.4	14.2	18.5	18.8	19.7
90°	0.9	3.4	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.8	69.6	221.6	96.4	64.8
97.5°	31.0	76.9	339.7	264.3	185.6
100°	39.2	81.7	375.9	381.0	307.7
102.5°	47.4	86.6	385.4	471.2	406.6
105°	61.4	95.5	380.1	578.8	544.6
107.5°	75.9	106.0	358.2	634.4	643.9
110°	86.1	113.6	341.8	645.3	686.1



TEST NUMBER: P564682

CATALOG NUMBER: SQ4-PW1-050U-100D-935-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.2	697.7
115°	109.1	132.4	304.3	605.4	689.5
117.5°	122.4	144.7	290.8	561.6	656.5
120°	131.3	152.9	284.7	532.3	626.5
122.5°	138.8	160.4	280.6	502.9	593.7
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.1	180.7	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.9
132.5°	172.3	192.3	269.7	399.8	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.7	265.9	346.0	382.7
142.5°	200.6	216.8	265.2	336.3	367.0
145°	208.8	223.8	264.2	321.0	345.2
147.5°	218.0	230.9	263.4	309.0	328.0
150°	224.2	235.0	263.4	302.1	317.1
152.5°	228.9	238.4	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.6	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.8	263.2	276.9	280.6
165°	255.7	259.0	263.4	274.5	275.3
167.5°	260.3	262.0	264.2	271.6	272.2
170°	261.7	263.3	264.2	270.2	270.2
172.5°	263.0	264.0	264.2	268.8	268.8
175°	265.1	265.9	264.2	267.6	266.8
177.5°	265.8	265.8	263.7	266.4	265.1
180°	265.1	265.1	265.1	265.1	265.1

(END OF REPORT)