

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: P563970

Luminaire Tested: **SQ4-PR1-050U-075D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P563970
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-075D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

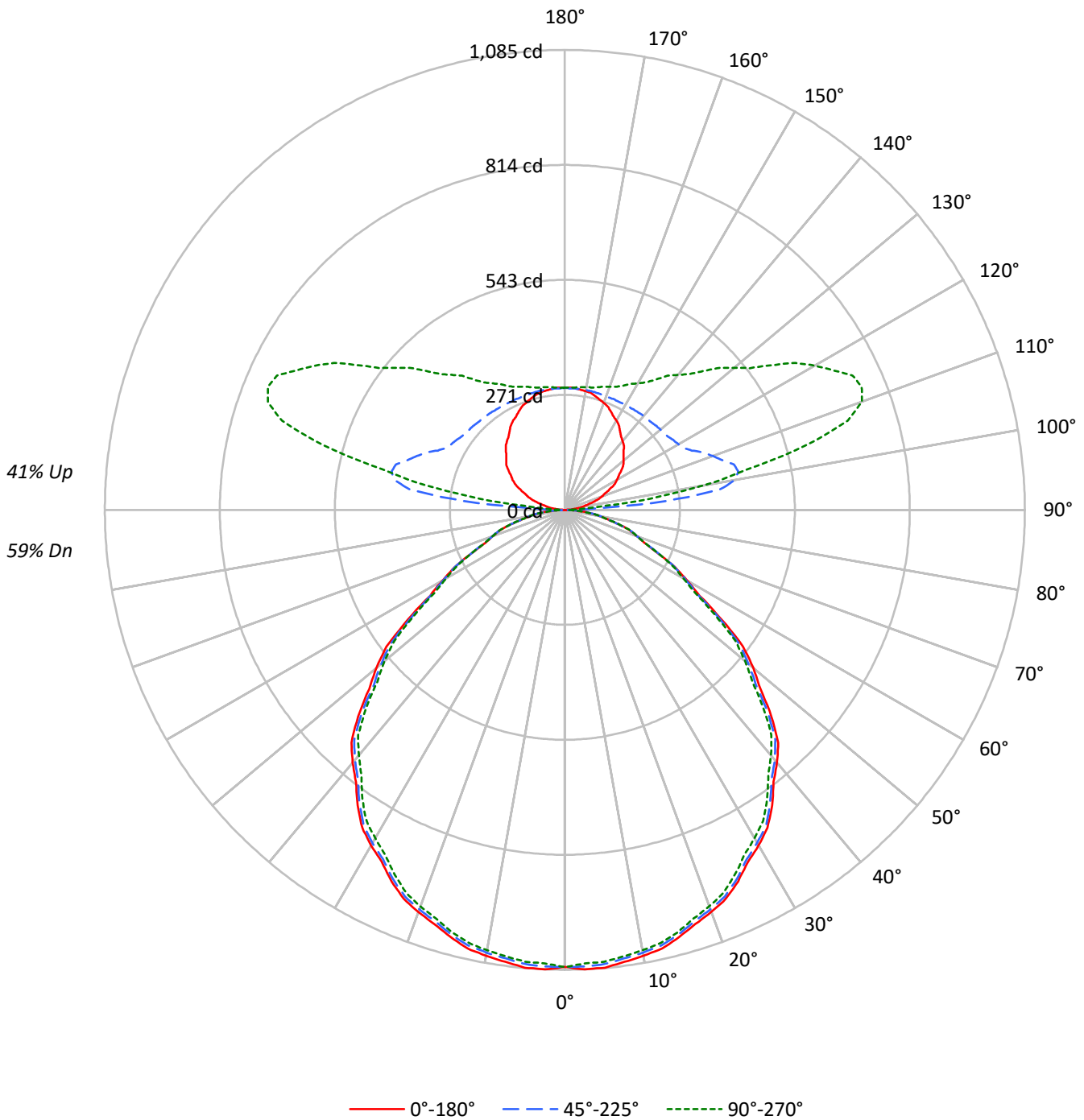
Lumens per Lamp: N/A
Luminaire Lumens: 4577.1 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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



TEST NUMBER: P563970
CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P563970

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9950	9950	9950
5°	10039	9962	9910
10°	10007	9937	9886
15°	9963	9901	9848
20°	9914	9850	9776
25°	9843	9777	9664
30°	9737	9668	9530
35°	9594	9509	9373
40°	9375	9274	9106
45°	8993	8835	8653
50°	8319	8120	7959
55°	7261	7097	6947
60°	6119	6067	5947
65°	5292	5314	5272
70°	4861	4885	4885
75°	4670	4670	4702
80°	4394	4442	4394
85°	3536	3938	3938



TEST NUMBER: P563970

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.0	2.2
10°-20°	291.8	6.4
20°-30°	440.1	9.6
30°-40°	524.4	11.5
40°-50°	517.0	11.3
50°-60°	395.1	8.6
60°-70°	244.5	5.3
70°-80°	138.9	3.0
80°-90°	43.4	0.9
90°-100°	138.2	3.0
100°-110°	375.5	8.2
110°-120°	386.1	8.4
120°-130°	308.7	6.7
130°-140°	242.5	5.3
140°-150°	186.0	4.1
150°-160°	133.7	2.9
160°-170°	81.8	1.8
170°-180°	27.6	0.6
0°-30°	833.8	18.2
0°-40°	1358.2	29.7
0°-60°	2270.2	49.6
0°-90°	2697.0	58.9
90°-120°	899.8	19.7
90°-150°	1637.0	35.8
90°-180°	1880.0	41.1
0°-180°	4577.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1078	1078	1078	1078	1078	
5°	1084	1072	1076	1072	1070	103
15°	1043	1032	1037	1033	1031	294
25°	967	955	960	950	949	445
35°	852	842	844	833	832	532
45°	689	680	677	665	663	528
55°	451	444	441	434	432	404
65°	242	241	243	242	242	246
75°	131	131	131	132	132	138
85°	33	35	37	37	37	39
90°	1	4	6	8	8	3
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

TEST NUMBER: P563970

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1078.4	1078.4	1078.4	1078.4	1078.4
2.5°	1085.1	1075.6	1078.4	1076.0	1071.0
5°	1084.0	1072.2	1075.6	1071.8	1070.0
7.5°	1075.6	1064.0	1067.4	1063.7	1062.6
10°	1068.2	1057.3	1060.7	1057.0	1055.2
12.5°	1060.0	1048.4	1052.6	1048.1	1046.3
15°	1043.1	1032.2	1036.6	1032.8	1031.0
17.5°	1024.5	1012.9	1017.3	1012.9	1010.6
20°	1009.7	998.8	1003.2	996.6	995.7
22.5°	993.3	982.4	986.8	978.1	977.9
25°	966.9	955.1	960.4	950.2	949.3
27.5°	935.5	924.6	929.0	918.6	917.5
30°	914.0	903.1	907.5	896.3	894.5
32.5°	889.5	879.3	883.0	871.8	870.7
35°	851.8	841.8	844.3	833.2	832.2
37.5°	808.8	799.8	801.2	788.9	788.0
40°	778.4	769.3	770.0	757.0	756.1
42.5°	744.9	735.9	735.1	722.1	721.2
45°	689.2	680.1	677.1	665.0	663.2
47.5°	625.7	616.6	611.0	601.1	599.8
50°	579.6	570.5	565.7	557.2	554.5
52.5°	529.8	520.7	516.6	508.9	506.2
55°	451.4	444.2	441.2	433.7	431.9
57.5°	376.9	372.0	371.2	363.9	363.2
60°	331.6	328.9	328.8	322.3	322.3
62.5°	293.0	291.0	292.4	288.1	287.4
65°	242.4	240.6	243.4	241.5	241.5
67.5°	202.5	202.5	204.2	203.4	203.4
70°	180.2	180.2	181.1	181.1	181.1
72.5°	160.1	159.4	161.8	161.8	161.1
75°	131.0	131.0	131.0	131.9	131.9
77.5°	102.0	102.2	102.9	102.7	102.0
80°	82.7	83.6	83.6	82.7	82.7
82.5°	63.3	64.3	64.3	64.1	63.3
85°	33.4	35.3	37.2	37.2	37.2
87.5°	9.8	13.3	16.2	16.5	15.8
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

TEST NUMBER: P563970

CATALOG NUMBER: SQ4-PR1-050U-075D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>103.1</i>	131.6	353.5	691.1	757.9
115°	<i>118.5</i>	143.9	330.5	657.6	749.1
117.5°	<i>133.0</i>	157.2	315.9	610.1	713.1
120°	<i>142.6</i>	166.1	309.3	578.2	680.5
122.5°	<i>150.7</i>	174.3	304.8	546.3	645.0
125°	<i>163.0</i>	185.6	299.1	503.9	594.4
127.5°	<i>173.9</i>	196.3	295.9	471.8	549.4
130°	<i>180.6</i>	202.3	294.4	451.6	521.3
132.5°	<i>187.2</i>	208.9	293.0	434.4	496.1
135°	<i>196.3</i>	218.0	290.7	410.4	463.0
137.5°	<i>206.1</i>	225.8	289.6	389.3	433.5
140°	<i>212.0</i>	231.0	288.9	375.9	415.7
142.5°	<i>218.0</i>	235.5	288.1	365.4	398.7
145°	<i>226.8</i>	243.1	287.0	348.7	375.0
147.5°	<i>236.8</i>	250.8	286.1	335.6	356.3
150°	<i>243.5</i>	255.3	286.1	328.1	344.4
152.5°	<i>248.7</i>	259.0	285.4	321.4	334.8
155°	<i>256.5</i>	265.5	285.2	313.2	322.2
157.5°	<i>264.1</i>	271.1	285.2	307.6	314.4
160°	<i>268.5</i>	274.9	285.2	303.8	309.3
162.5°	<i>273.0</i>	277.8	285.9	300.8	304.8
165°	<i>277.8</i>	281.4	286.1	298.2	299.1
167.5°	<i>282.8</i>	284.6	287.0	295.0	295.7
170°	<i>284.3</i>	286.1	287.0	293.5	293.5
172.5°	<i>285.7</i>	286.8	287.0	292.0	292.0
175°	<i>288.0</i>	288.9	287.0	290.7	289.8
177.5°	<i>288.7</i>	288.7	286.5	289.4	288.0
180°	<i>288.0</i>	288.0	288.0	288.0	288.0

(END OF REPORT)