

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

Brand: CORELITE

Report Number: P688878

Luminaire Tested: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1674.1 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

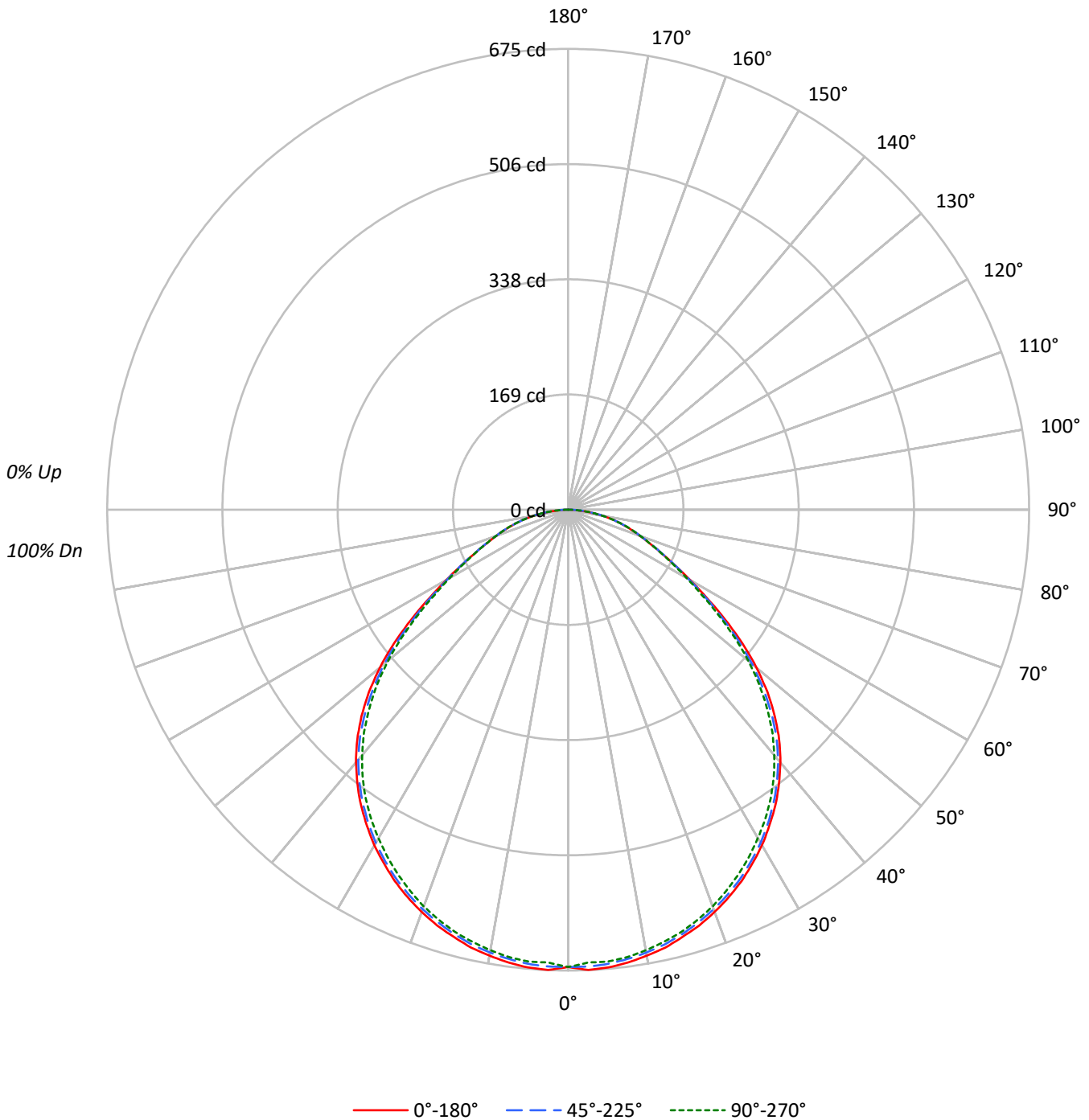
Input Watts (W): 21
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688878

CATALOG NUMBER: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P688878

CATALOG NUMBER: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K

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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6447	6447	6447
5°	6505	6455	6422
10°	6484	6439	6405
15°	6456	6416	6381
20°	6424	6382	6335
25°	6378	6335	6262
30°	6310	6264	6175
35°	6216	6162	6074
40°	6075	6010	5900
45°	5827	5725	5607
50°	5390	5262	5157
55°	4705	4599	4502
60°	3965	3932	3853
65°	3428	3442	3417
70°	3150	3167	3167
75°	3024	3024	3046
80°	2844	2877	2844
85°	2298	2552	2552

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5827 cd/sqm

TEST NUMBER: P688878

CATALOG NUMBER: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.8
10°-20°	181.3	10.8
20°-30°	273.4	16.3
30°-40°	325.9	19.5
40°-50°	321.4	19.2
50°-60°	245.2	14.6
60°-70°	151.3	9.0
70°-80°	86.2	5.2
80°-90°	26.0	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	518.1	30.9
0°-40°	843.9	50.4
0°-60°	1410.6	84.3
0°-90°	1674.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1674.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	673	666	668	666	664	64
15°	648	641	644	641	640	183
25°	600	593	596	590	590	276
35°	529	523	524	517	517	330
45°	428	422	420	413	412	328
55°	280	276	274	269	268	251
65°	150	149	151	150	150	152
75°	81	81	81	82	82	86
85°	21	22	23	23	23	25
90°	0	0	0	0	0	

TEST NUMBER: P688878

CATALOG NUMBER: SQ4R-PR1-050D-92765-1-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.7	669.7	669.7	669.7	669.7
2.5°	674.8	667.3	669.7	667.9	663.9
5°	673.1	665.6	667.9	665.6	664.5
7.5°	669.1	661.6	663.9	661.6	661.0
10°	663.3	656.4	658.7	656.4	655.2
12.5°	657.0	649.5	652.4	649.5	648.3
15°	647.7	640.8	643.7	641.4	640.2
17.5°	638.5	631.0	633.9	631.6	629.9
20°	627.0	620.1	622.9	618.9	618.3
22.5°	614.3	607.4	610.2	604.5	604.5
25°	600.4	592.9	596.4	590.1	589.5
27.5°	584.3	577.4	580.3	573.9	573.3
30°	567.6	560.6	563.5	556.6	555.5
32.5°	548.5	542.2	544.5	537.6	537.0
35°	528.9	522.6	524.3	517.4	516.8
37.5°	507.0	501.2	502.4	494.9	494.3
40°	483.4	477.6	478.2	470.1	469.5
42.5°	457.4	451.6	451.1	443.0	442.4
45°	428.0	422.2	420.5	413.0	411.8
47.5°	395.7	389.9	386.5	380.1	379.5
50°	359.9	354.2	351.3	346.1	344.3
52.5°	321.3	315.5	313.2	308.6	306.9
55°	280.3	275.7	274.0	269.4	268.2
57.5°	241.1	237.6	237.1	232.4	231.9
60°	205.9	204.2	204.2	200.1	200.1
62.5°	175.9	174.8	175.9	173.6	173.0
65°	150.5	149.4	151.1	150.0	150.0
67.5°	129.2	129.2	130.4	129.8	129.8
70°	111.9	111.9	112.5	112.5	112.5
72.5°	96.3	95.7	97.5	97.5	96.9
75°	81.3	81.3	81.3	81.9	81.9
77.5°	66.3	66.3	66.9	66.9	66.3
80°	51.3	51.9	51.9	51.3	51.3
82.5°	36.3	36.9	36.9	36.9	36.3
85°	20.8	21.9	23.1	23.1	23.1
87.5°	7.5	9.8	11.5	11.5	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)