

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: P688956

Luminaire Tested: SQ4R-PW1-050D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688956
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-050D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 1751.0 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

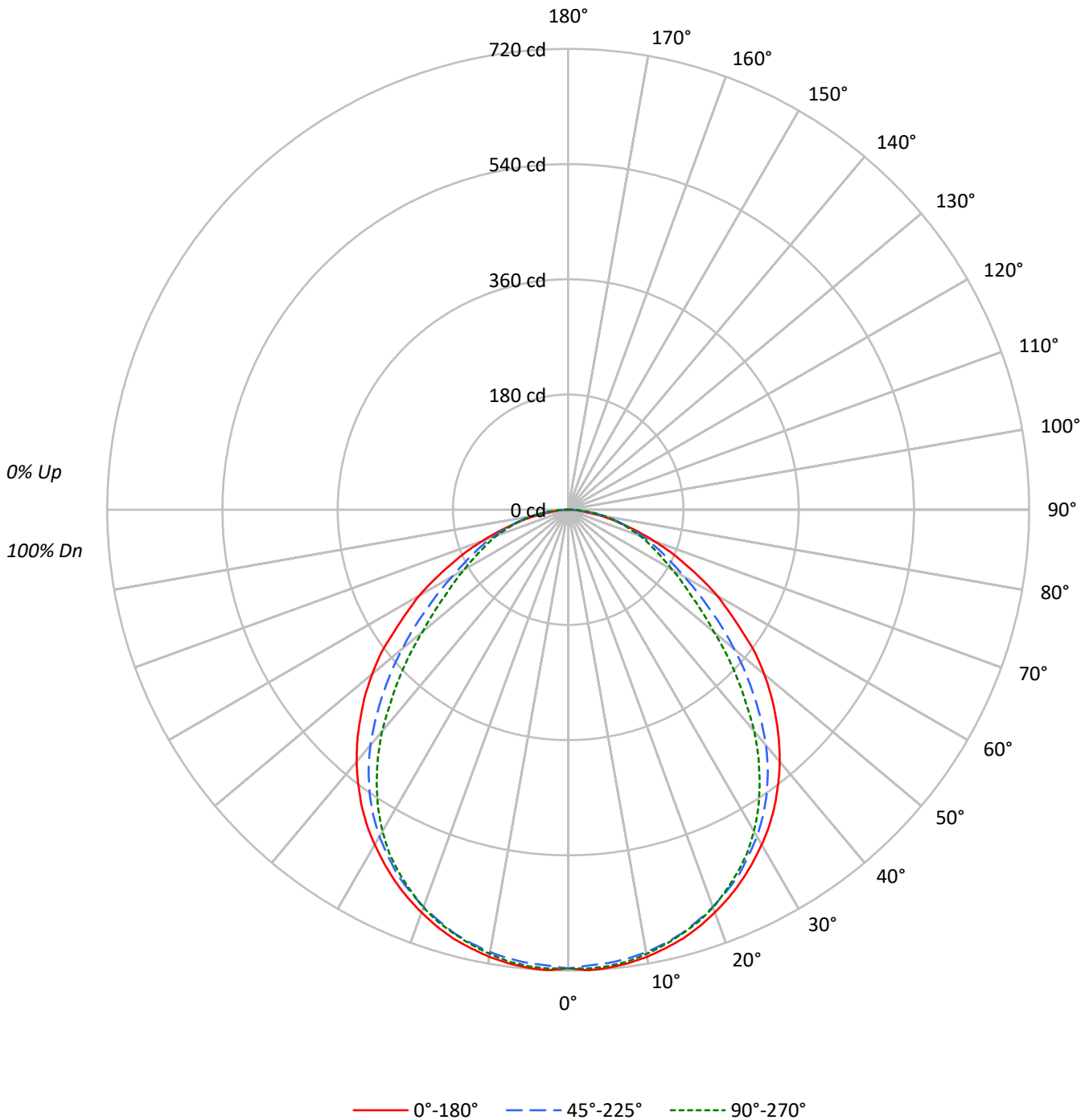
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	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	59	50	44	57	49	44	55	49	44	54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6899	6899	6899
5°	6944	6872	6917
10°	6934	6862	6889
15°	6913	6830	6839
20°	6861	6766	6776
25°	6801	6692	6643
30°	6718	6553	6451
35°	6614	6355	6128
40°	6460	6043	5684
45°	6245	5581	5092
50°	5988	5064	4456
55°	5566	4498	3943
60°	5180	4026	3618
65°	4595	3736	3419
70°	3994	3552	3369
75°	3288	3359	3221
80°	2606	3166	3166
85°	1933	2850	2949

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6245 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.9
10°-20°	194.2	11.1
20°-30°	290.9	16.6
30°-40°	338.0	19.3
40°-50°	318.9	18.2
50°-60°	248.8	14.2
60°-70°	168.9	9.6
70°-80°	95.1	5.4
80°-90°	28.3	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°	553.1	31.6
0°-40°	891.1	50.9
0°-60°	1458.7	83.3
0°-90°	1751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1751.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	718	717	711	717	716	68
15°	694	691	685	689	686	196
25°	640	637	630	628	625	295
35°	563	557	541	529	521	352
45°	459	445	410	384	374	354
55°	332	312	268	242	235	298
65°	202	183	164	154	150	202
75°	88	92	90	87	87	96
85°	18	25	26	26	27	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	716.6	716.6	716.6	716.6	716.6
2.5°	720.3	718.5	712.9	718.5	717.6
5°	718.5	716.6	711.1	716.6	715.7
7.5°	714.8	713.9	707.4	712.9	712.0
10°	709.3	708.3	701.9	706.5	704.7
12.5°	701.9	701.0	694.5	698.2	696.4
15°	693.6	690.8	685.3	689.0	686.2
17.5°	682.5	679.8	673.3	676.1	675.2
20°	669.7	666.9	660.4	663.2	661.4
22.5°	655.8	653.1	645.7	646.6	643.9
25°	640.2	637.4	630.0	628.2	625.4
27.5°	622.7	620.8	609.8	607.9	605.2
30°	604.3	601.5	589.5	585.8	580.3
32.5°	584.9	579.4	566.5	559.1	552.7
35°	562.8	557.3	540.7	528.7	521.4
37.5°	538.9	530.6	512.1	495.6	488.2
40°	514.0	504.8	480.8	458.7	452.3
42.5°	487.3	476.2	445.8	422.8	411.7
45°	458.7	444.9	409.9	384.1	374.0
47.5°	430.2	412.7	374.9	347.3	336.2
50°	399.8	378.6	338.1	308.6	297.5
52.5°	368.4	345.4	304.0	273.6	265.3
55°	331.6	312.3	268.0	242.3	234.9
57.5°	298.4	277.3	238.6	216.5	210.9
60°	269.0	243.2	209.1	192.5	187.9
62.5°	234.9	211.9	185.1	172.2	167.6
65°	201.7	183.3	164.0	153.8	150.1
67.5°	173.2	157.5	144.6	136.3	134.5
70°	141.9	133.6	126.2	119.7	119.7
72.5°	115.1	112.4	107.8	104.1	101.3
75°	88.4	92.1	90.3	86.6	86.6
77.5°	67.2	72.8	73.7	71.8	72.8
80°	47.0	55.3	57.1	56.2	57.1
82.5°	29.5	39.6	41.5	41.5	42.4
85°	17.5	24.9	25.8	25.8	26.7
87.5°	7.4	12.0	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)