

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: P688732

Luminaire Tested: SQ4R-PH1-050D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688732
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-050D-93050-1-UNV-STD-W-4_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1981.4 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

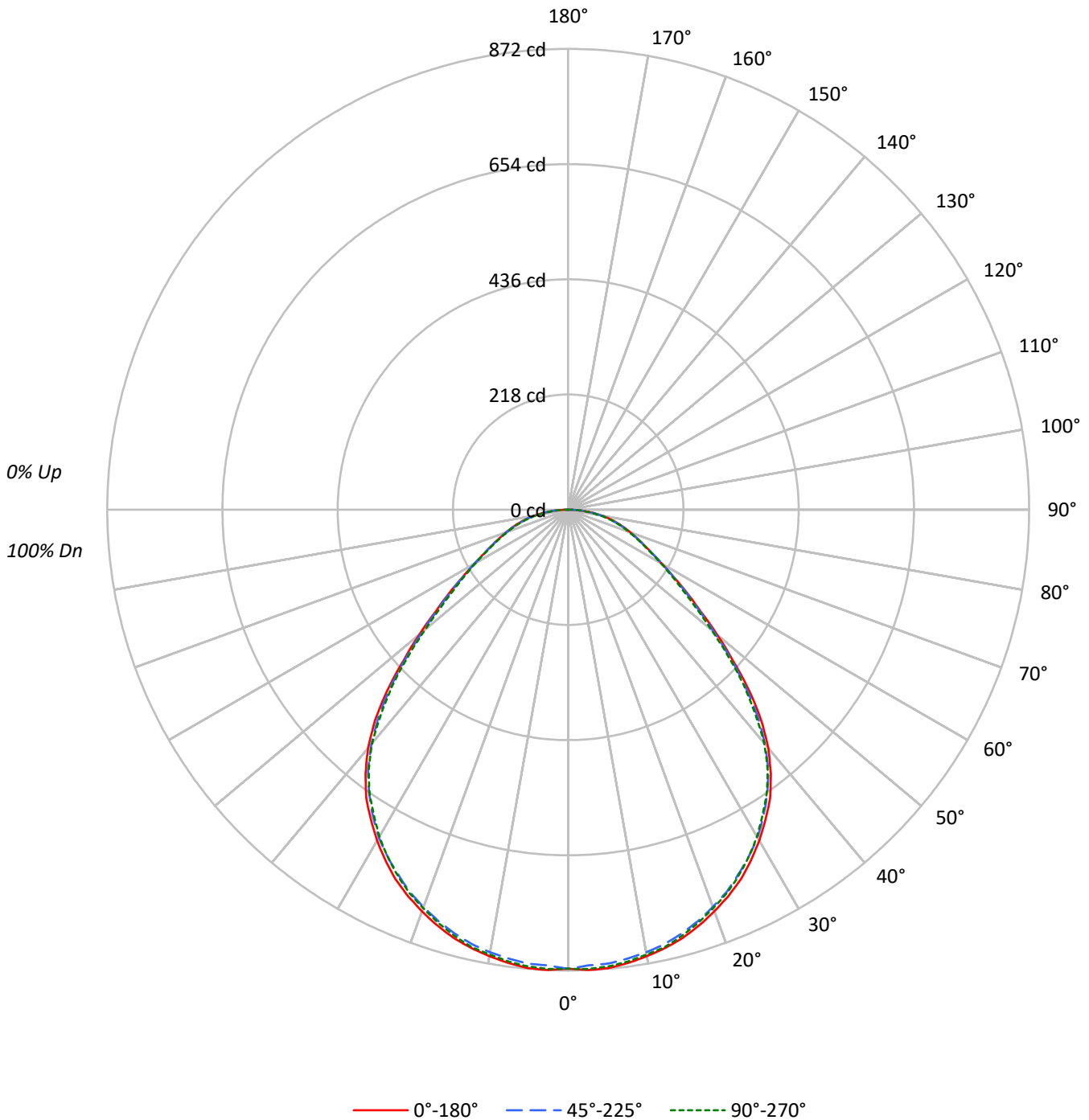
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8362	8362	8362
5°	8416	8332	8385
10°	8387	8313	8355
15°	8358	8273	8315
20°	8284	8196	8219
25°	8202	8088	8111
30°	8035	7964	7940
35°	7827	7713	7700
40°	7399	7278	7252
45°	6599	6469	6395
50°	5509	5396	5284
55°	4591	4535	4428
60°	3943	3965	3882
65°	3615	3590	3542
70°	3502	3471	3412
75°	3549	3470	3392
80°	3565	3509	3387
85°	3435	3435	3203

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6599 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	4.2
10°-20°	235.4	11.9
20°-30°	352.6	17.8
30°-40°	410.3	20.7
40°-50°	364.9	18.4
50°-60°	245.0	12.4
60°-70°	158.4	8.0
70°-80°	98.7	5.0
80°-90°	33.8	1.7
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°	670.3	33.8
0°-40°	1080.6	54.5
0°-60°	1690.5	85.3
0°-90°	1981.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1981.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	869	869	869	869	869	
5°	871	869	862	869	868	83
15°	839	836	830	835	834	236
25°	772	769	761	766	764	355
35°	666	663	656	656	655	414
45°	485	483	475	469	470	370
55°	274	274	270	266	264	248
65°	159	160	158	157	156	159
75°	95	94	93	93	91	100
85°	31	32	31	30	29	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	868.6	868.6	868.6	868.6	868.6
2.5°	871.9	869.7	863.3	870.8	869.7
5°	870.8	868.6	862.2	868.6	867.6
7.5°	865.4	864.4	856.8	864.4	862.2
10°	857.9	857.9	850.4	856.8	854.7
12.5°	849.3	848.3	841.8	848.3	847.2
15°	838.6	836.5	830.0	835.4	834.3
17.5°	824.7	823.6	816.1	821.5	819.3
20°	808.6	806.4	800.0	804.3	802.2
22.5°	791.4	789.3	782.9	786.1	785.0
25°	772.1	768.9	761.4	765.7	763.6
27.5°	748.5	747.5	740.0	742.1	740.0
30°	722.8	721.7	716.4	716.4	714.2
32.5°	694.9	696.0	687.4	688.5	684.2
35°	666.0	662.7	656.3	656.3	655.2
37.5°	629.5	627.4	622.0	620.9	619.8
40°	588.7	586.6	579.1	577.0	577.0
42.5°	540.5	538.3	530.8	527.6	523.3
45°	484.7	482.6	475.1	468.6	469.7
47.5°	422.5	424.7	417.2	411.8	410.7
50°	367.8	366.8	360.3	357.1	352.8
52.5°	315.3	316.4	311.0	308.9	303.5
55°	273.5	273.5	270.2	266.0	263.8
57.5°	235.9	238.1	234.9	232.7	230.6
60°	204.8	205.9	205.9	201.6	201.6
62.5°	179.1	180.2	179.1	176.9	176.9
65°	158.7	159.8	157.6	156.6	155.5
67.5°	140.5	141.6	140.5	139.4	137.3
70°	124.4	124.4	123.3	123.3	121.2
72.5°	110.5	109.4	108.3	108.3	107.2
75°	95.4	94.4	93.3	93.3	91.2
77.5°	80.4	79.4	79.4	77.2	76.1
80°	64.3	64.3	63.3	62.2	61.1
82.5°	49.3	48.3	47.2	46.1	45.0
85°	31.1	32.2	31.1	30.0	29.0
87.5°	13.9	15.0	15.0	15.0	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)