

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: P688727

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688727
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-92765-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1978.1 lumens
Efficiency: N/A
Efficacy: 93.3 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

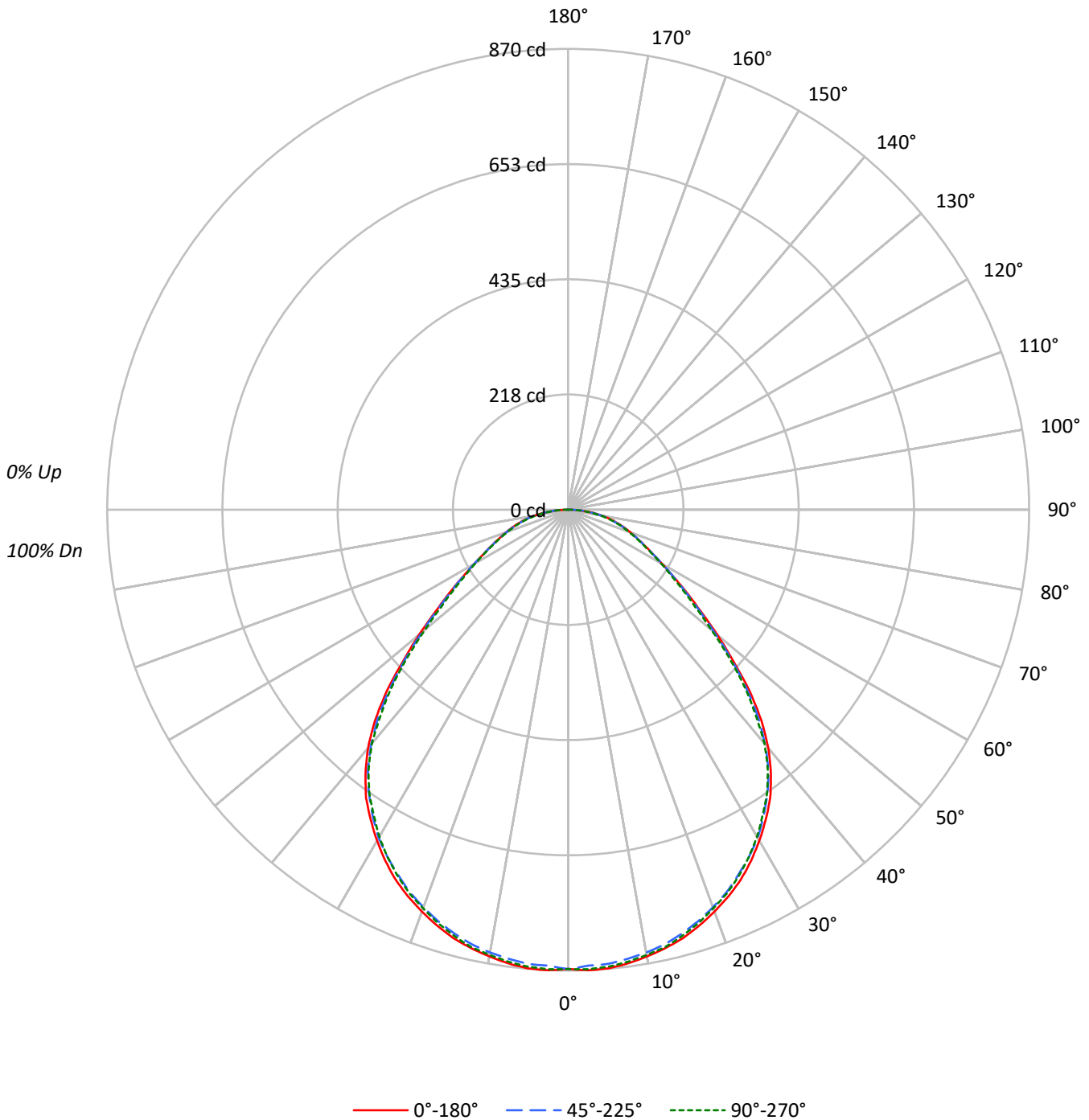
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8349	8349	8349
5°	8401	8319	8370
10°	8373	8300	8342
15°	8344	8259	8301
20°	8270	8183	8204
25°	8188	8074	8098
30°	8022	7951	7926
35°	7813	7700	7688
40°	7387	7265	7239
45°	6588	6458	6384
50°	5500	5387	5275
55°	4582	4529	4421
60°	3938	3959	3876
65°	3608	3586	3535
70°	3496	3465	3406
75°	3545	3463	3385
80°	3559	3504	3382
85°	3424	3424	3192

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6588 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.2	4.2
10°-20°	235.0	11.9
20°-30°	352.0	17.8
30°-40°	409.6	20.7
40°-50°	364.3	18.4
50°-60°	244.6	12.4
60°-70°	158.1	8.0
70°-80°	98.5	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°	669.2	33.8
0°-40°	1078.8	54.5
0°-60°	1687.7	85.3
0°-90°	1978.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1978.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	867	867	867	867	867	
5°	869	867	861	867	866	83
15°	837	835	829	834	833	236
25°	771	768	760	764	762	354
35°	665	662	655	655	654	413
45°	484	482	474	468	469	370
55°	273	273	270	266	263	247
65°	158	160	157	156	155	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°	867.2	867.2	867.2	867.2	867.2
2.5°	870.4	868.3	861.8	869.3	868.3
5°	869.3	867.2	860.8	867.2	866.1
7.5°	864.0	862.9	855.4	862.9	860.8
10°	856.5	856.5	849.0	855.4	853.3
12.5°	847.9	846.8	840.4	846.8	845.8
15°	837.2	835.1	828.6	834.0	832.9
17.5°	823.3	822.2	814.7	820.1	817.9
20°	807.2	805.1	798.7	803.0	800.8
22.5°	790.1	788.0	781.5	784.8	783.7
25°	770.8	767.6	760.1	764.4	762.3
27.5°	747.3	746.2	738.7	740.9	738.7
30°	721.6	720.5	715.2	715.2	713.0
32.5°	693.7	694.8	686.3	687.3	683.0
35°	664.8	661.6	655.2	655.2	654.1
37.5°	628.4	626.3	620.9	619.9	618.8
40°	587.8	585.6	578.1	576.0	576.0
42.5°	539.6	537.4	529.9	526.7	522.5
45°	483.9	481.8	474.3	467.9	468.9
47.5°	421.8	424.0	416.5	411.1	410.0
50°	367.2	366.1	359.7	356.5	352.2
52.5°	314.8	315.8	310.5	308.3	303.0
55°	273.0	273.0	269.8	265.5	263.4
57.5°	235.5	237.7	234.5	232.3	230.2
60°	204.5	205.6	205.6	201.3	201.3
62.5°	178.8	179.9	178.8	176.6	176.6
65°	158.4	159.5	157.4	156.3	155.2
67.5°	140.2	141.3	140.2	139.2	137.0
70°	124.2	124.2	123.1	123.1	121.0
72.5°	110.3	109.2	108.1	108.1	107.1
75°	95.3	94.2	93.1	93.1	91.0
77.5°	80.3	79.2	79.2	77.1	76.0
80°	64.2	64.2	63.2	62.1	61.0
82.5°	49.2	48.2	47.1	46.0	45.0
85°	31.0	32.1	31.0	30.0	28.9
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)