

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: P688731

Luminaire Tested: SQ4R-PH1-050D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688731
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_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1946.6 lumens
Efficiency: N/A
Efficacy: 91.4 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

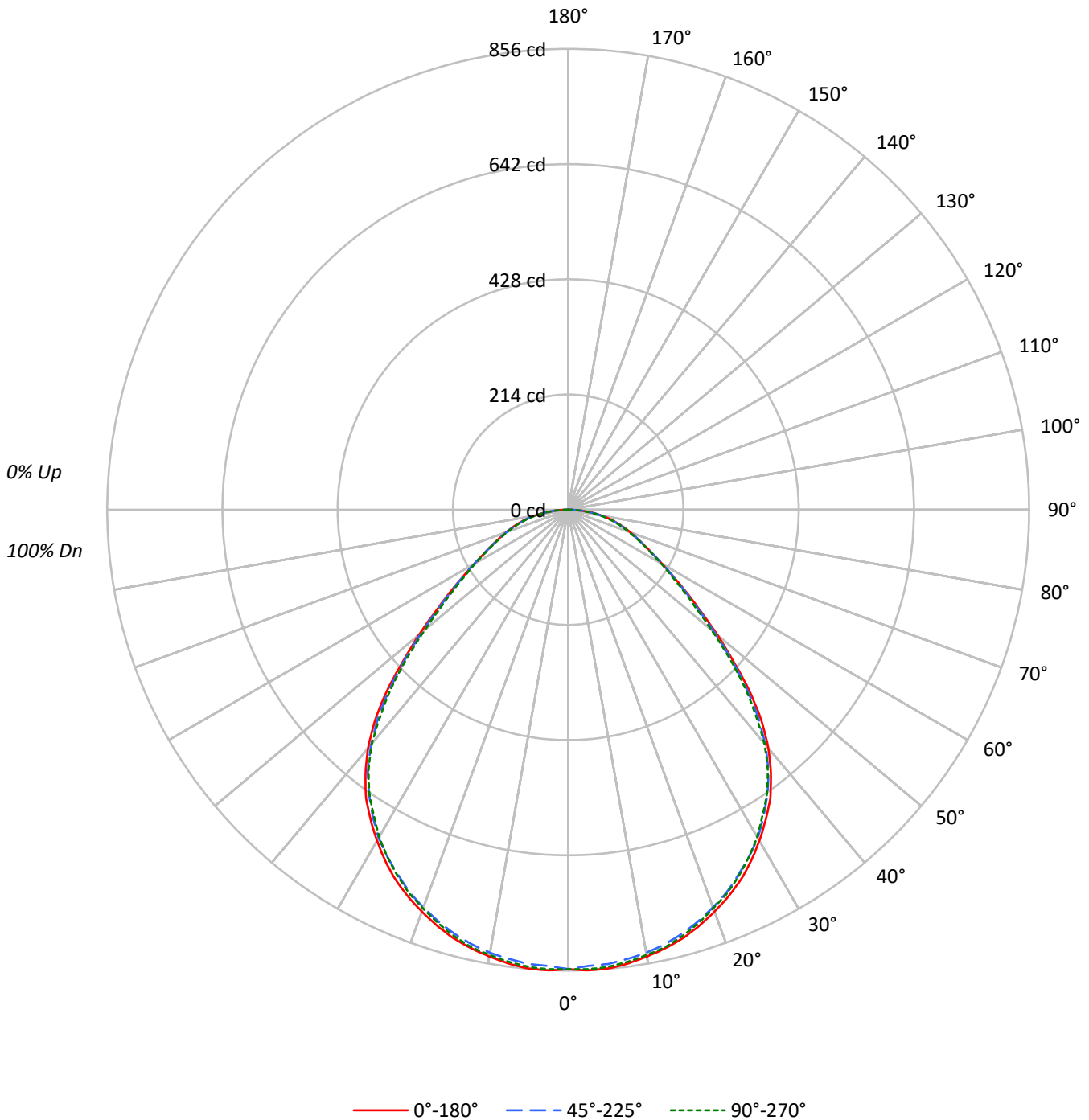
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8216	8216	8216
5°	8268	8186	8237
10°	8239	8168	8209
15°	8212	8128	8170
20°	8139	8053	8074
25°	8058	7946	7968
30°	7894	7824	7801
35°	7690	7578	7565
40°	7269	7150	7123
45°	6484	6354	6283
50°	5413	5302	5191
55°	4510	4456	4351
60°	3874	3895	3814
65°	3551	3529	3481
70°	3440	3412	3352
75°	3489	3411	3333
80°	3504	3448	3332
85°	3380	3380	3137

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6484 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.9	4.2
10°-20°	231.2	11.9
20°-30°	346.4	17.8
30°-40°	403.1	20.7
40°-50°	358.5	18.4
50°-60°	240.7	12.4
60°-70°	155.6	8.0
70°-80°	97.0	5.0
80°-90°	33.2	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°	658.6	33.8
0°-40°	1061.6	54.5
0°-60°	1660.8	85.3
0°-90°	1946.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1946.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	856	853	847	853	852	81
15°	824	822	816	821	820	232
25°	759	755	748	752	750	349
35°	654	651	645	645	644	407
45°	476	474	467	460	462	364
55°	269	269	266	261	259	243
65°	156	157	155	154	153	156
75°	94	93	92	92	90	99
85°	31	32	31	30	28	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.4	853.4	853.4	853.4	853.4
2.5°	856.5	854.4	848.1	855.5	854.4
5°	855.5	853.4	847.1	853.4	852.3
7.5°	850.2	849.2	841.8	849.2	847.1
10°	842.8	842.8	835.5	841.8	839.7
12.5°	834.4	833.4	827.0	833.4	832.3
15°	823.9	821.8	815.5	820.7	819.7
17.5°	810.2	809.1	801.8	807.0	804.9
20°	794.4	792.3	786.0	790.2	788.1
22.5°	777.5	775.4	769.1	772.3	771.2
25°	758.6	755.4	748.0	752.2	750.1
27.5°	735.4	734.3	727.0	729.1	727.0
30°	710.1	709.0	703.8	703.8	701.7
32.5°	682.7	683.8	675.3	676.4	672.2
35°	654.3	651.1	644.8	644.8	643.7
37.5°	618.4	616.3	611.1	610.0	609.0
40°	578.4	576.3	568.9	566.8	566.8
42.5°	531.0	528.9	521.5	518.4	514.1
45°	476.2	474.1	466.7	460.4	461.5
47.5°	415.1	417.2	409.8	404.6	403.5
50°	361.4	360.3	354.0	350.8	346.6
52.5°	309.7	310.8	305.5	303.4	298.2
55°	268.7	268.7	265.5	261.3	259.2
57.5°	231.8	233.9	230.7	228.6	226.5
60°	201.2	202.3	202.3	198.1	198.1
62.5°	175.9	177.0	175.9	173.8	173.8
65°	155.9	157.0	154.9	153.8	152.8
67.5°	138.0	139.1	138.0	137.0	134.9
70°	122.2	122.2	121.2	121.2	119.1
72.5°	108.5	107.5	106.4	106.4	105.4
75°	93.8	92.7	91.7	91.7	89.6
77.5°	79.0	78.0	78.0	75.9	74.8
80°	63.2	63.2	62.2	61.1	60.1
82.5°	48.5	47.4	46.4	45.3	44.2
85°	30.6	31.6	30.6	29.5	28.4
87.5°	13.7	14.7	14.7	14.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)