

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: P688722

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688722
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_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX 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: 1731.8 lumens
Efficiency: N/A
Efficacy: 82.5 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

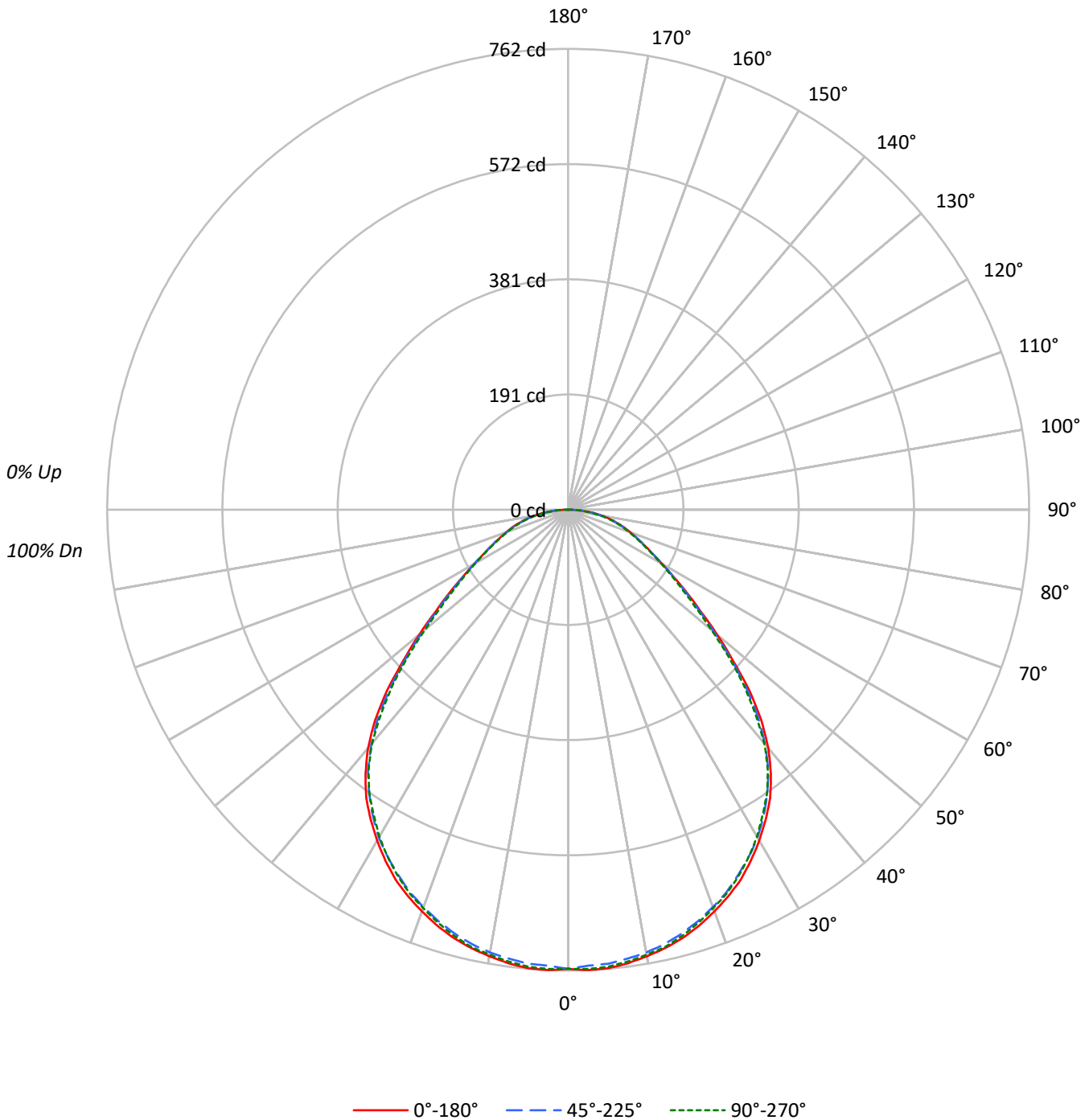
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7309	7309	7309
5°	7355	7283	7328
10°	7330	7266	7303
15°	7306	7231	7268
20°	7240	7163	7183
25°	7169	7069	7090
30°	7022	6960	6939
35°	6841	6741	6731
40°	6467	6360	6338
45°	5769	5653	5589
50°	4815	4716	4619
55°	4012	3965	3871
60°	3447	3466	3393
65°	3160	3139	3096
70°	3060	3034	2981
75°	3102	3032	2965
80°	3116	3066	2961
85°	3005	3005	2795

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5769 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	4.2
10°-20°	205.7	11.9
20°-30°	308.2	17.8
30°-40°	358.6	20.7
40°-50°	318.9	18.4
50°-60°	214.1	12.4
60°-70°	138.4	8.0
70°-80°	86.3	5.0
80°-90°	29.6	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°	585.9	33.8
0°-40°	944.5	54.5
0°-60°	1477.6	85.3
0°-90°	1731.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1731.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	761	759	754	759	758	72
15°	733	731	726	730	729	207
25°	675	672	666	669	667	310
35°	582	579	574	574	573	362
45°	424	422	415	410	410	324
55°	239	239	236	232	231	217
65°	139	140	138	137	136	139
75°	83	82	82	82	80	88
85°	27	28	27	26	25	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.2	759.2	759.2	759.2	759.2
2.5°	762.0	760.2	754.5	761.1	760.2
5°	761.1	759.2	753.6	759.2	758.3
7.5°	756.4	755.5	748.9	755.5	753.6
10°	749.8	749.8	743.3	748.9	747.0
12.5°	742.3	741.4	735.8	741.4	740.5
15°	733.0	731.1	725.5	730.2	729.2
17.5°	720.8	719.9	713.3	718.0	716.1
20°	706.7	704.9	699.2	703.0	701.1
22.5°	691.7	689.9	684.2	687.0	686.1
25°	674.9	672.1	665.5	669.2	667.4
27.5°	654.2	653.3	646.7	648.6	646.7
30°	631.7	630.8	626.1	626.1	624.2
32.5°	607.4	608.3	600.8	601.8	598.0
35°	582.1	579.3	573.6	573.6	572.7
37.5°	550.2	548.3	543.6	542.7	541.8
40°	514.6	512.7	506.1	504.3	504.3
42.5°	472.4	470.5	464.0	461.2	457.4
45°	423.7	421.8	415.2	409.6	410.5
47.5°	369.3	371.2	364.6	359.9	359.0
50°	321.5	320.6	314.9	312.1	308.4
52.5°	275.6	276.5	271.8	269.9	265.3
55°	239.0	239.0	236.2	232.5	230.6
57.5°	206.2	208.1	205.3	203.4	201.5
60°	179.0	180.0	180.0	176.2	176.2
62.5°	156.5	157.5	156.5	154.7	154.7
65°	138.7	139.7	137.8	136.8	135.9
67.5°	122.8	123.7	122.8	121.9	120.0
70°	108.7	108.7	107.8	107.8	105.9
72.5°	96.5	95.6	94.7	94.7	93.7
75°	83.4	82.5	81.5	81.5	79.7
77.5°	70.3	69.4	69.4	67.5	66.5
80°	56.2	56.2	55.3	54.4	53.4
82.5°	43.1	42.2	41.2	40.3	39.4
85°	27.2	28.1	27.2	26.2	25.3
87.5°	12.2	13.1	13.1	13.1	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)