

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: P688725

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688725
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_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: 1900.1 lumens
Efficiency: N/A
Efficacy: 89.6 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

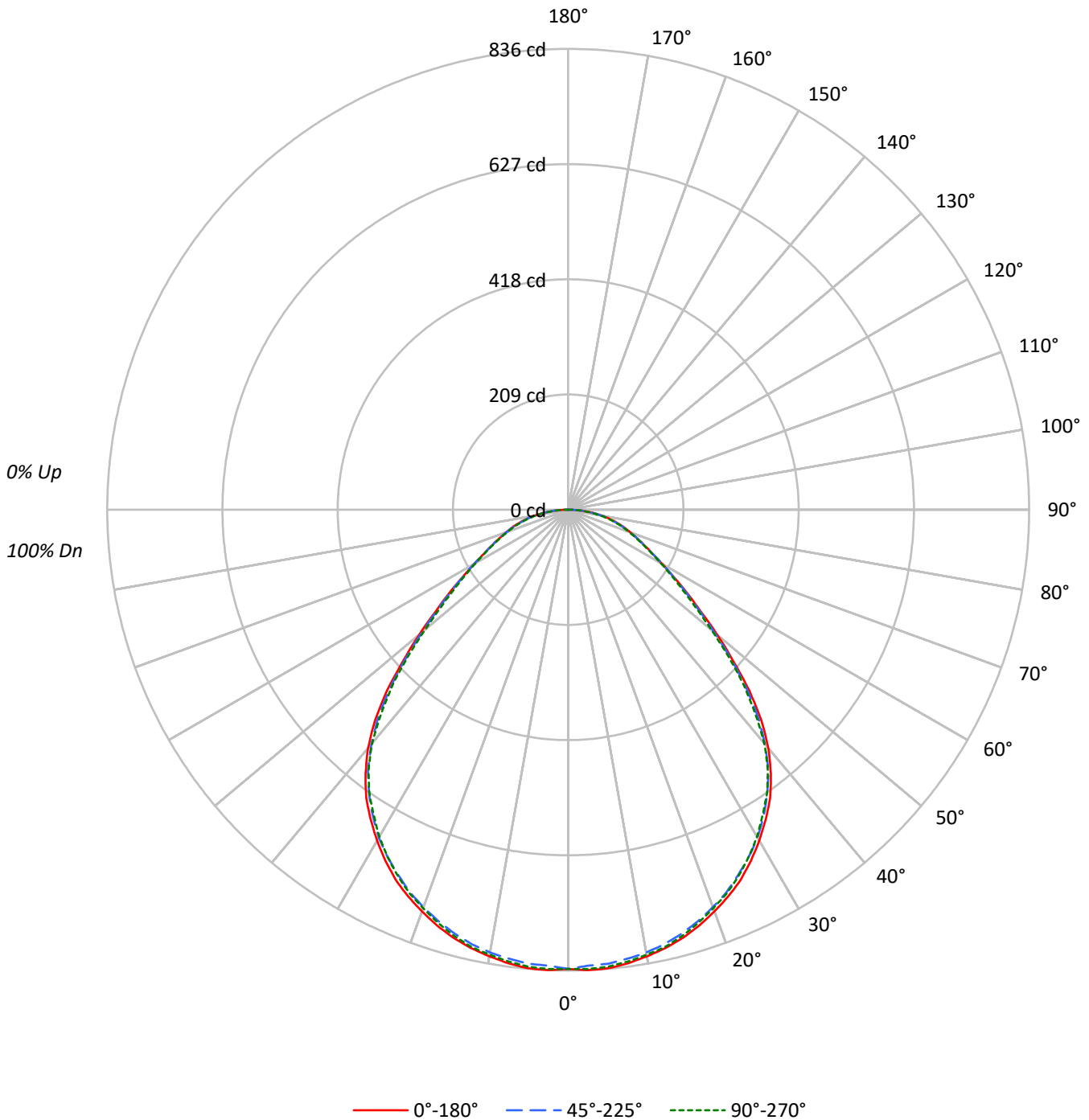
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8020	8020	8020
5°	8071	7990	8041
10°	8043	7972	8012
15°	8015	7934	7975
20°	7944	7860	7881
25°	7865	7757	7778
30°	7705	7637	7614
35°	7505	7397	7384
40°	7096	6979	6954
45°	6328	6203	6132
50°	5283	5175	5067
55°	4401	4351	4247
60°	3782	3803	3722
65°	3467	3444	3397
70°	3358	3330	3271
75°	3404	3329	3251
80°	3421	3365	3249
85°	3292	3292	3071

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6328 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	4.2
10°-20°	225.7	11.9
20°-30°	338.1	17.8
30°-40°	393.4	20.7
40°-50°	349.9	18.4
50°-60°	235.0	12.4
60°-70°	151.9	8.0
70°-80°	94.7	5.0
80°-90°	32.4	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°	642.8	33.8
0°-40°	1036.3	54.5
0°-60°	1621.1	85.3
0°-90°	1900.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1900.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	835	833	827	833	832	79
15°	804	802	796	801	800	227
25°	740	737	730	734	732	340
35°	639	636	629	629	628	397
45°	465	463	456	449	450	355
55°	262	262	259	255	253	238
65°	152	153	151	150	149	152
75°	92	90	90	90	87	96
85°	30	31	30	29	28	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.0	833.0	833.0	833.0	833.0
2.5°	836.1	834.0	827.9	835.1	834.0
5°	835.1	833.0	826.8	833.0	832.0
7.5°	829.9	828.9	821.7	828.9	826.8
10°	822.7	822.7	815.5	821.7	819.6
12.5°	814.5	813.5	807.3	813.5	812.4
15°	804.2	802.1	796.0	801.1	800.1
17.5°	790.8	789.8	782.6	787.7	785.7
20°	775.4	773.3	767.2	771.3	769.2
22.5°	759.0	756.9	750.7	753.8	752.8
25°	740.4	737.4	730.2	734.3	732.2
27.5°	717.8	716.8	709.6	711.6	709.6
30°	693.1	692.1	687.0	687.0	684.9
32.5°	666.4	667.4	659.2	660.2	656.1
35°	638.6	635.5	629.4	629.4	628.3
37.5°	603.7	601.6	596.5	595.4	594.4
40°	564.6	562.5	555.3	553.3	553.3
42.5°	518.3	516.3	509.1	506.0	501.9
45°	464.8	462.8	455.6	449.4	450.4
47.5°	405.2	407.2	400.0	394.9	393.9
50°	352.7	351.7	345.5	342.5	338.3
52.5°	302.3	303.4	298.2	296.2	291.0
55°	262.2	262.2	259.2	255.0	253.0
57.5°	226.2	228.3	225.2	223.2	221.1
60°	196.4	197.5	197.5	193.3	193.3
62.5°	171.7	172.8	171.7	169.7	169.7
65°	152.2	153.2	151.2	150.1	149.1
67.5°	134.7	135.7	134.7	133.7	131.6
70°	119.3	119.3	118.3	118.3	116.2
72.5°	105.9	104.9	103.9	103.9	102.8
75°	91.5	90.5	89.5	89.5	87.4
77.5°	77.1	76.1	76.1	74.0	73.0
80°	61.7	61.7	60.7	59.6	58.6
82.5°	47.3	46.3	45.2	44.2	43.2
85°	29.8	30.9	29.8	28.8	27.8
87.5°	13.4	14.4	14.4	14.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)