

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: P688724

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688724
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_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: 1843.9 lumens
Efficiency: N/A
Efficacy: 87.0 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

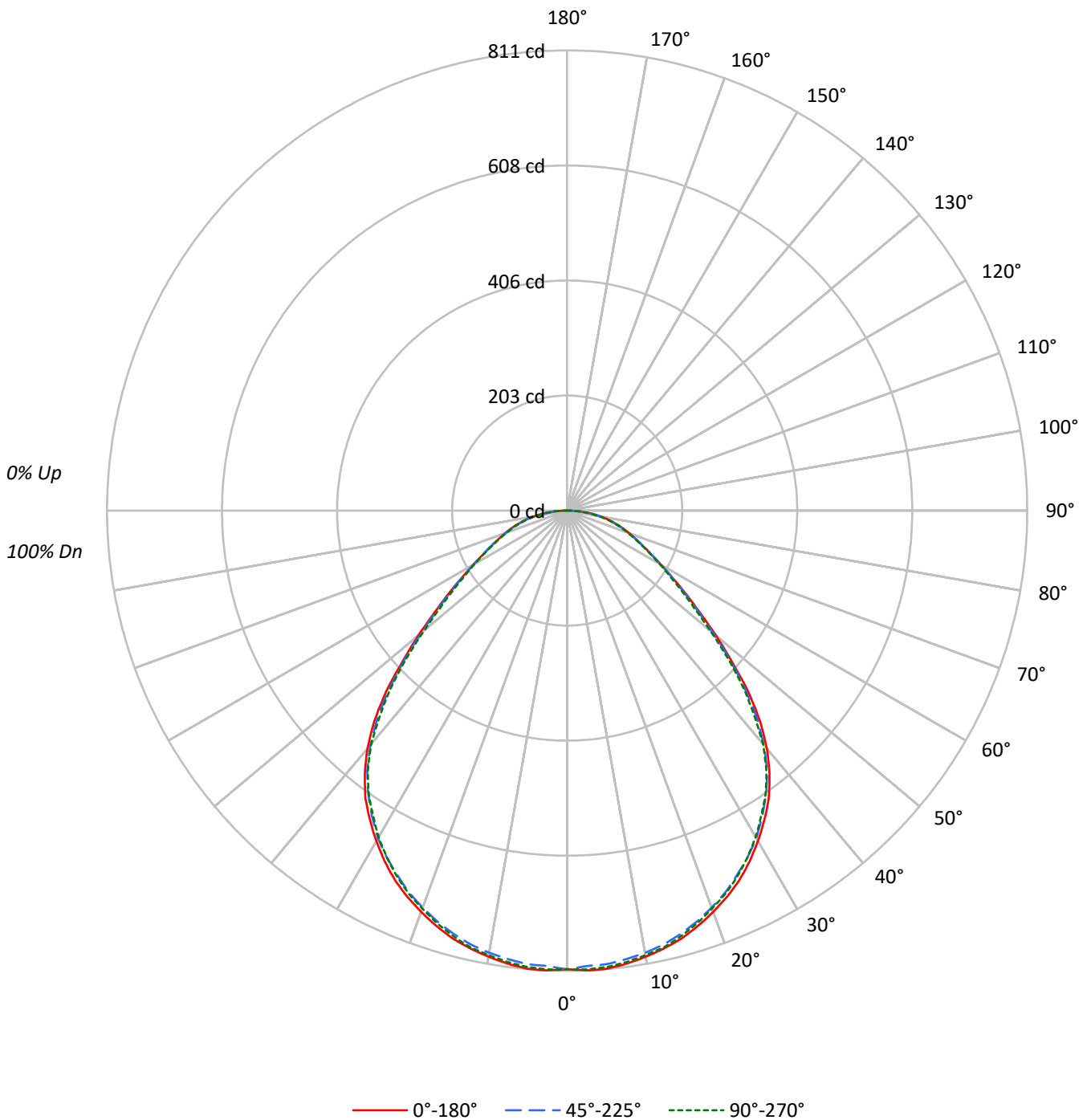
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	7783	7783	7783
5°	7832	7754	7803
10°	7805	7737	7776
15°	7778	7698	7738
20°	7710	7628	7648
25°	7632	7527	7548
30°	7477	7410	7388
35°	7283	7179	7167
40°	6886	6773	6748
45°	6142	6019	5951
50°	5127	5022	4917
55°	4272	4221	4121
60°	3670	3689	3612
65°	3365	3342	3296
70°	3260	3231	3175
75°	3303	3229	3154
80°	3321	3266	3155
85°	3192	3192	2971

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	4.2
10°-20°	219.0	11.9
20°-30°	328.1	17.8
30°-40°	381.8	20.7
40°-50°	339.6	18.4
50°-60°	228.0	12.4
60°-70°	147.4	8.0
70°-80°	91.9	5.0
80°-90°	31.5	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°	623.8	33.8
0°-40°	1005.6	54.5
0°-60°	1573.2	85.3
0°-90°	1843.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	810	808	802	808	807	77
15°	780	778	772	777	776	220
25°	718	716	709	712	711	330
35°	620	617	611	611	610	385
45°	451	449	442	436	437	345
55°	254	254	252	248	246	231
65°	148	149	147	146	145	148
75°	89	88	87	87	85	93
85°	29	30	29	28	27	32
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.4	808.4	808.4	808.4	808.4
2.5°	811.3	809.4	803.4	810.4	809.4
5°	810.4	808.4	802.4	808.4	807.4
7.5°	805.4	804.4	797.4	804.4	802.4
10°	798.4	798.4	791.4	797.4	795.4
12.5°	790.4	789.4	783.4	789.4	788.4
15°	780.4	778.4	772.4	777.4	776.4
17.5°	767.4	766.4	759.5	764.4	762.4
20°	752.5	750.5	744.5	748.5	746.5
22.5°	736.5	734.5	728.5	731.5	730.5
25°	718.5	715.5	708.6	712.5	710.6
27.5°	696.6	695.6	688.6	690.6	688.6
30°	672.6	671.6	666.6	666.6	664.6
32.5°	646.7	647.7	639.7	640.7	636.7
35°	619.7	616.7	610.8	610.8	609.8
37.5°	585.8	583.8	578.8	577.8	576.8
40°	547.9	545.9	538.9	536.9	536.9
42.5°	503.0	501.0	494.0	491.0	487.0
45°	451.1	449.1	442.1	436.1	437.1
47.5°	393.2	395.2	388.2	383.2	382.2
50°	342.3	341.3	335.3	332.3	328.3
52.5°	293.4	294.4	289.4	287.4	282.4
55°	254.5	254.5	251.5	247.5	245.5
57.5°	219.6	221.5	218.6	216.6	214.6
60°	190.6	191.6	191.6	187.6	187.6
62.5°	166.7	167.7	166.7	164.7	164.7
65°	147.7	148.7	146.7	145.7	144.7
67.5°	130.7	131.7	130.7	129.7	127.7
70°	115.8	115.8	114.8	114.8	112.8
72.5°	102.8	101.8	100.8	100.8	99.8
75°	88.8	87.8	86.8	86.8	84.8
77.5°	74.8	73.8	73.8	71.9	70.9
80°	59.9	59.9	58.9	57.9	56.9
82.5°	45.9	44.9	43.9	42.9	41.9
85°	28.9	29.9	28.9	27.9	26.9
87.5°	13.0	14.0	14.0	14.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)