

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: P688501

Luminaire Tested: SQ4R-PH1-050D-835-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688501
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1847.7 lumens
Efficiency: N/A
Efficacy: 97.8 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

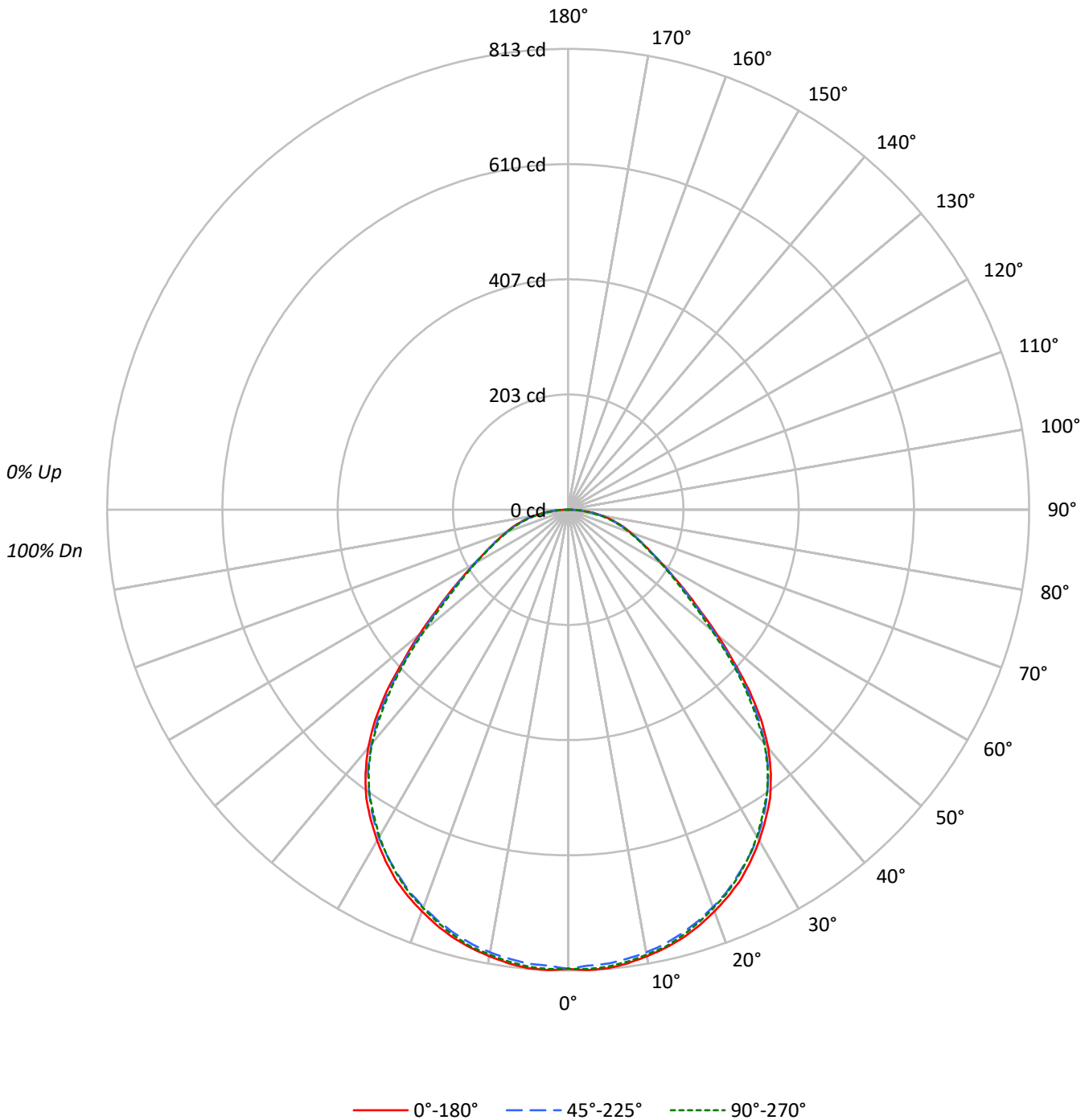
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7798	7798	7798
5°	7847	7770	7818
10°	7821	7752	7791
15°	7794	7714	7754
20°	7725	7643	7663
25°	7648	7542	7563
30°	7493	7426	7404
35°	7298	7193	7181
40°	6900	6787	6761
45°	6154	6031	5963
50°	5137	5032	4928
55°	4280	4230	4129
60°	3678	3697	3620
65°	3371	3349	3303
70°	3265	3237	3181
75°	3311	3236	3162
80°	3326	3271	3160
85°	3203	3203	2982

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6154 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	4.2
10°-20°	219.5	11.9
20°-30°	328.8	17.8
30°-40°	382.6	20.7
40°-50°	340.3	18.4
50°-60°	228.5	12.4
60°-70°	147.7	8.0
70°-80°	92.1	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°	625.1	33.8
0°-40°	1007.7	54.5
0°-60°	1576.4	85.3
0°-90°	1847.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1847.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	812	810	804	810	809	77
15°	782	780	774	779	778	220
25°	720	717	710	714	712	331
35°	621	618	612	612	611	386
45°	452	450	443	437	438	345
55°	255	255	252	248	246	231
65°	148	149	147	146	145	148
75°	89	88	87	87	85	94
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°	810	810	810	810	810
2.5°	813	811	805	812	811
5°	812	810	804	810	809
7.5°	807	806	799	806	804
10°	800	800	793	799	797
12.5°	792	791	785	791	790
15°	782	780	774	779	778
17.5°	769	768	761	766	764
20°	754	752	746	750	748
22.5°	738	736	730	733	732
25°	720	717	710	714	712
27.5°	698	697	690	692	690
30°	674	673	668	668	666
32.5°	648	649	641	642	638
35°	621	618	612	612	611
37.5°	587	585	580	579	578
40°	549	547	540	538	538
42.5°	504	502	495	492	488
45°	452	450	443	437	438
47.5°	394	396	389	384	383
50°	343	342	336	333	329
52.5°	294	295	290	288	283
55°	255	255	252	248	246
57.5°	220	222	219	217	215
60°	191	192	192	188	188
62.5°	167	168	167	165	165
65°	148	149	147	146	145
67.5°	131	132	131	130	128
70°	116	116	115	115	113
72.5°	103	102	101	101	100
75°	89	88	87	87	85
77.5°	75	74	74	72	71
80°	60	60	59	58	57
82.5°	46	45	44	43	42
85°	29	30	29	28	27
87.5°	13	14	14	14	13
90°	0	0	0	0	0

(END OF REPORT)