

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: P688748

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688748
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-PH1-100D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3447.3 lumens
Efficiency: N/A
Efficacy: 75.1 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

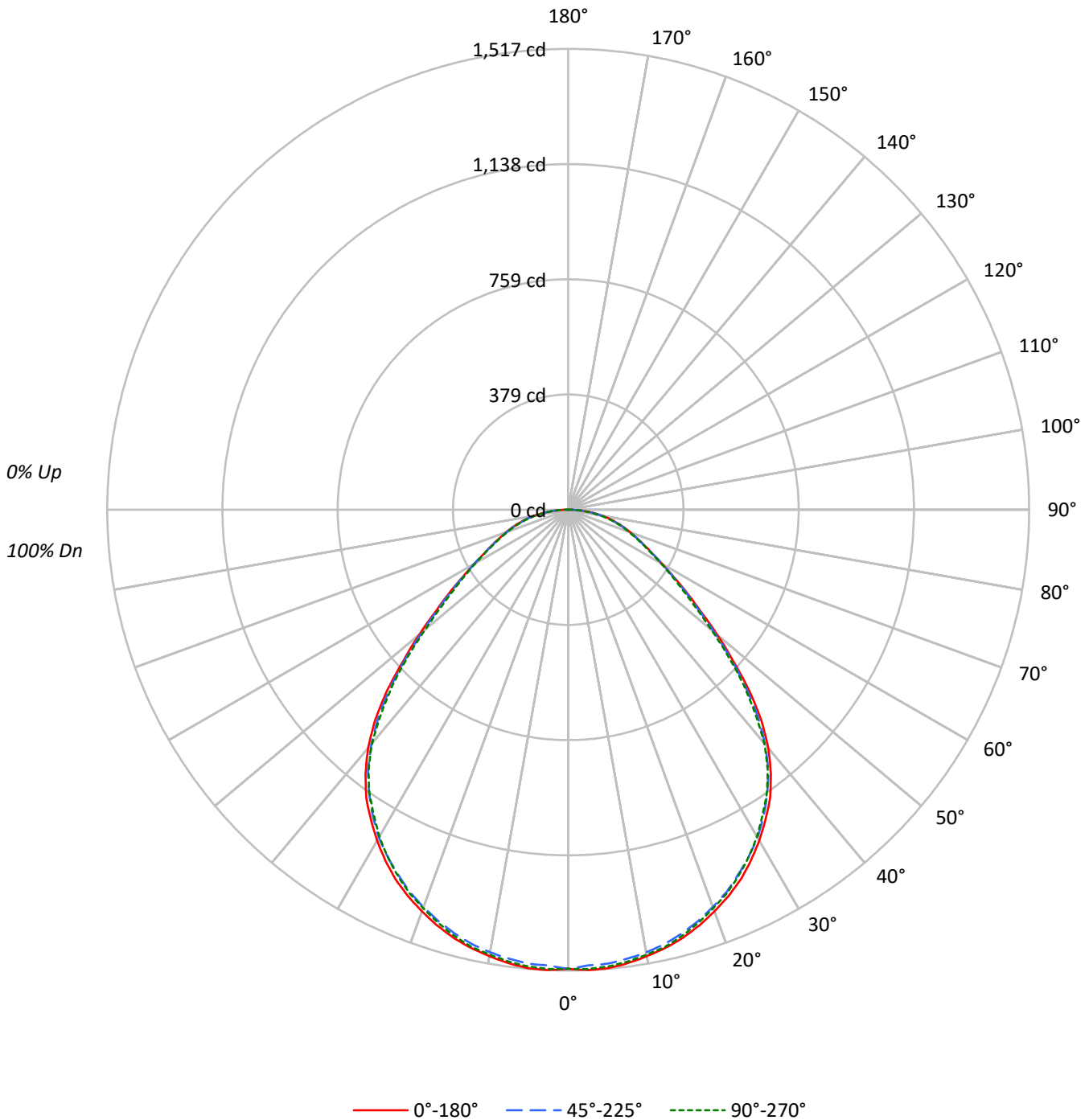
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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					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°	14550	14550	14550
5°	14641	14497	14587
10°	14591	14464	14537
15°	14542	14393	14468
20°	14413	14260	14298
25°	14270	14072	14111
30°	13979	13855	13814
35°	13617	13421	13398
40°	12873	12662	12615
45°	11482	11253	11126
50°	9586	9389	9193
55°	7986	7892	7704
60°	6862	6897	6755
65°	6290	6249	6162
70°	6091	6041	5934
75°	6178	6037	5899
80°	6204	6104	5893
85°	5976	5976	5567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11482 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.3	4.2
10°-20°	409.5	11.9
20°-30°	613.5	17.8
30°-40°	713.8	20.7
40°-50°	634.8	18.4
50°-60°	426.3	12.4
60°-70°	275.5	8.0
70°-80°	171.7	5.0
80°-90°	58.9	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°	1166.3	33.8
0°-40°	1880.1	54.5
0°-60°	2941.2	85.3
0°-90°	3447.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3447.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1511	1511	1511	1511	1511	
5°	1515	1511	1500	1511	1509	144
15°	1459	1455	1444	1453	1452	411
25°	1343	1338	1325	1332	1328	618
35°	1159	1153	1142	1142	1140	720
45°	843	840	826	815	817	645
55°	476	476	470	463	459	431
65°	276	278	274	272	270	277
75°	166	164	162	162	159	175
85°	54	56	54	52	50	60
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1511.3	1511.3	1511.3	1511.3	1511.3
2.5°	1516.9	1513.1	1501.9	1515.0	1513.1
5°	1515.0	1511.3	1500.1	1511.3	1509.4
7.5°	1505.7	1503.8	1490.8	1503.8	1500.1
10°	1492.6	1492.6	1479.6	1490.8	1487.0
12.5°	1477.7	1475.8	1464.6	1475.8	1474.0
15°	1459.0	1455.3	1444.1	1453.4	1451.6
17.5°	1434.8	1432.9	1419.9	1429.2	1425.5
20°	1406.8	1403.1	1391.9	1399.3	1395.6
22.5°	1376.9	1373.2	1362.0	1367.6	1365.7
25°	1343.4	1337.8	1324.7	1332.2	1328.4
27.5°	1302.3	1300.4	1287.4	1291.1	1287.4
30°	1257.5	1255.7	1246.3	1246.3	1242.6
32.5°	1209.0	1210.9	1196.0	1197.8	1190.4
35°	1158.6	1153.0	1141.9	1141.9	1140.0
37.5°	1095.2	1091.5	1082.1	1080.3	1078.4
40°	1024.3	1020.6	1007.5	1003.8	1003.8
42.5°	940.4	936.6	923.6	918.0	910.5
45°	843.3	839.6	826.5	815.3	817.2
47.5°	735.1	738.8	725.8	716.5	714.6
50°	640.0	638.1	626.9	621.3	613.8
52.5°	548.5	550.4	541.1	537.3	528.0
55°	475.8	475.8	470.2	462.7	459.0
57.5°	410.5	414.2	408.6	404.9	401.1
60°	356.4	358.2	358.2	350.8	350.8
62.5°	311.6	313.5	311.6	307.9	307.9
65°	276.1	278.0	274.3	272.4	270.5
67.5°	244.4	246.3	244.4	242.6	238.8
70°	216.4	216.4	214.6	214.6	210.8
72.5°	192.2	190.3	188.4	188.4	186.6
75°	166.1	164.2	162.3	162.3	158.6
77.5°	139.9	138.1	138.1	134.3	132.5
80°	111.9	111.9	110.1	108.2	106.3
82.5°	85.8	84.0	82.1	80.2	78.4
85°	54.1	56.0	54.1	52.2	50.4
87.5°	24.3	26.1	26.1	26.1	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)