

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: P688586

Luminaire Tested: SQ4R-PR1-100D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3935.4 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

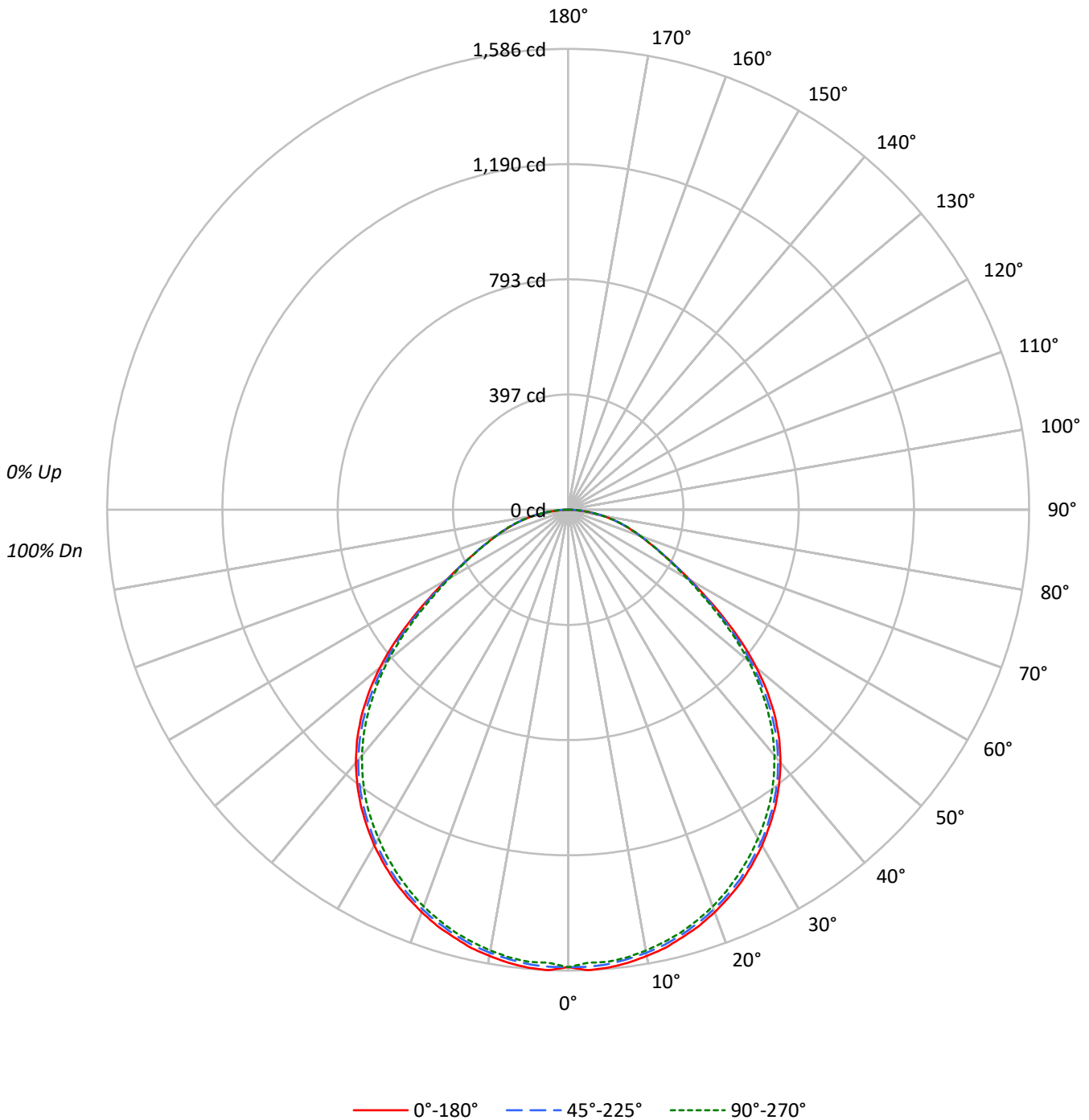
Input Watts (W): 37
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15155	15155	15155
5°	15292	15174	15095
10°	15243	15137	15058
15°	15177	15082	15000
20°	15100	15003	14891
25°	14994	14893	14720
30°	14832	14726	14515
35°	14613	14485	14278
40°	14279	14126	13871
45°	13698	13459	13181
50°	12672	12367	12124
55°	11061	10811	10583
60°	9321	9242	9059
65°	8062	8092	8030
70°	7403	7442	7442
75°	7112	7112	7160
80°	6692	6764	6692
85°	5391	5987	5987

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13698 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.9	3.8
10°-20°	426.2	10.8
20°-30°	642.7	16.3
30°-40°	766.0	19.5
40°-50°	755.6	19.2
50°-60°	576.4	14.6
60°-70°	355.7	9.0
70°-80°	202.7	5.2
80°-90°	61.1	1.6
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°	1217.8	30.9
0°-40°	1983.8	50.4
0°-60°	3315.8	84.3
0°-90°	3935.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3935.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1582	1565	1570	1565	1562	150
15°	1523	1506	1513	1508	1505	430
25°	1412	1394	1402	1387	1386	650
35°	1243	1228	1232	1216	1215	777
45°	1006	992	988	971	968	772
55°	659	648	644	633	630	590
65°	354	351	355	352	352	357
75°	191	191	191	192	192	202
85°	49	52	54	54	54	58
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1574.2	1574.2	1574.2	1574.2	1574.2
2.5°	1586.4	1568.8	1574.2	1570.1	1560.6
5°	1582.3	1564.7	1570.1	1564.7	1562.0
7.5°	1572.8	1555.2	1560.6	1555.2	1553.9
10°	1559.3	1543.0	1548.4	1543.0	1540.3
12.5°	1544.4	1526.7	1533.5	1526.7	1524.0
15°	1522.7	1506.4	1513.2	1507.8	1505.0
17.5°	1501.0	1483.4	1490.1	1484.7	1480.6
20°	1473.9	1457.6	1464.4	1454.9	1453.5
22.5°	1444.0	1427.8	1434.5	1421.0	1421.0
25°	1411.5	1393.9	1402.0	1387.1	1385.7
27.5°	1373.5	1357.3	1364.0	1349.1	1347.8
30°	1334.2	1317.9	1324.7	1308.4	1305.7
32.5°	1289.5	1274.5	1280.0	1263.7	1262.3
35°	1243.4	1228.4	1232.5	1216.2	1214.9
37.5°	1191.8	1178.3	1181.0	1163.4	1162.0
40°	1136.2	1122.7	1124.0	1105.1	1103.7
42.5°	1075.2	1061.7	1060.3	1041.3	1040.0
45°	1006.1	992.5	988.5	970.8	968.1
47.5°	930.1	916.6	908.5	893.5	892.2
50°	846.1	832.5	825.7	813.5	809.5
52.5°	755.2	741.7	736.3	725.4	721.3
55°	659.0	648.1	644.1	633.2	630.5
57.5°	566.8	558.6	557.3	546.4	545.1
60°	484.1	480.0	480.0	470.5	470.5
62.5°	413.5	410.8	413.5	408.1	406.8
65°	353.9	351.2	355.2	352.5	352.5
67.5°	303.7	303.7	306.4	305.1	305.1
70°	263.0	263.0	264.4	264.4	264.4
72.5°	226.4	225.1	229.1	229.1	227.8
75°	191.2	191.2	191.2	192.5	192.5
77.5°	155.9	155.9	157.3	157.3	155.9
80°	120.7	122.0	122.0	120.7	120.7
82.5°	85.4	86.8	86.8	86.8	85.4
85°	48.8	51.5	54.2	54.2	54.2
87.5°	17.6	23.1	27.1	27.1	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)