

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: P688585

Luminaire Tested: SQ4R-PR1-100D-835-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688585
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-835-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3828.8 lumens
Efficiency: N/A
Efficacy: 103.5 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

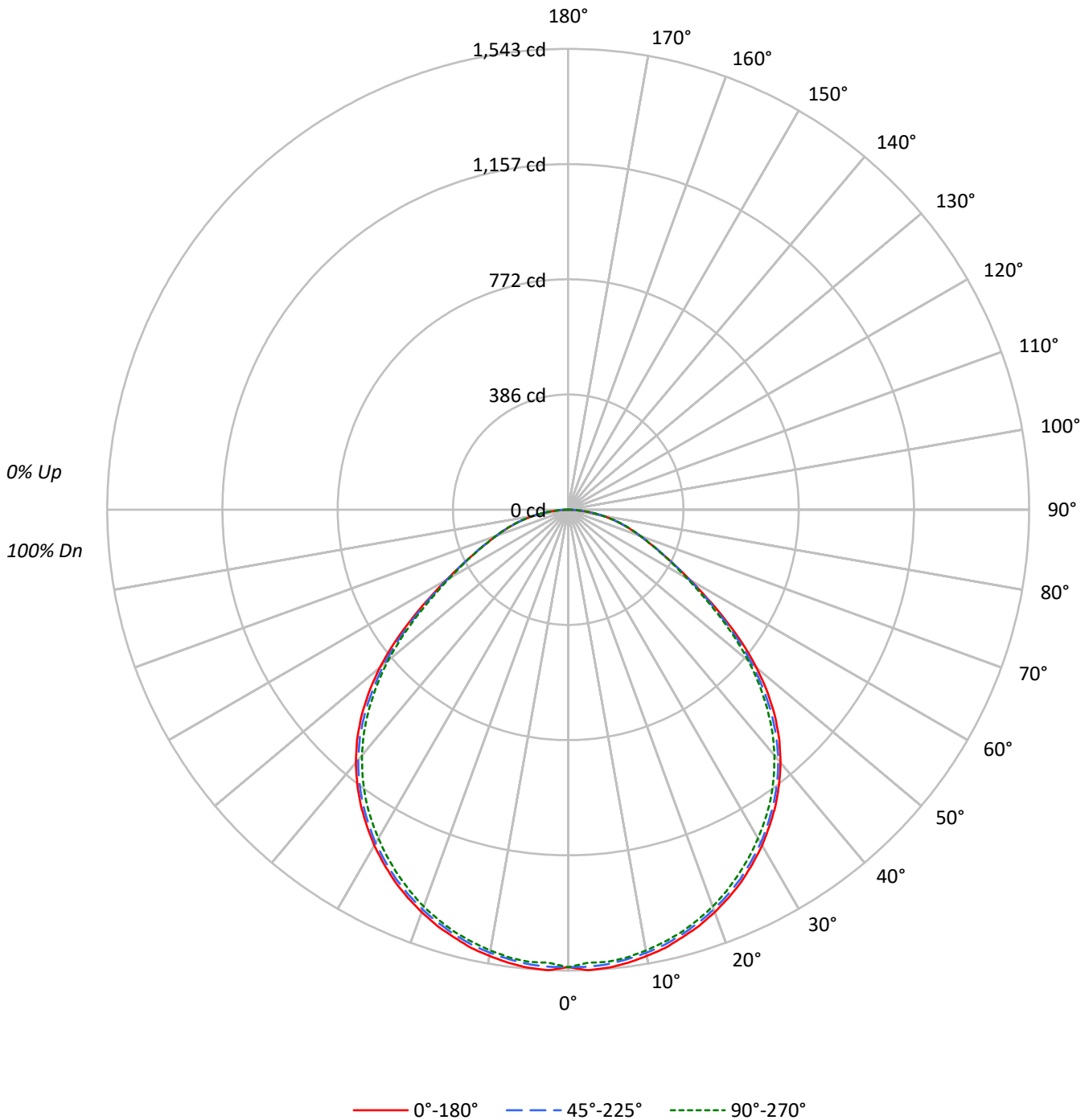
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688585

CATALOG NUMBER: SQ4R-PR1-100D-835-1-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER: P688585

CATALOG NUMBER: SQ4R-PR1-100D-835-1-UNV-STD-W-4

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	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°	14744	14744	14744
5°	14878	14763	14687
10°	14830	14727	14650
15°	14765	14673	14595
20°	14691	14596	14488
25°	14587	14489	14321
30°	14429	14327	14122
35°	14217	14093	13892
40°	13893	13744	13495
45°	13326	13094	12824
50°	12329	12033	11795
55°	10761	10517	10296
60°	9067	8992	8813
65°	7843	7873	7814
70°	7203	7240	7240
75°	6919	6919	6967
80°	6509	6581	6509
85°	5247	5832	5832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13326 cd/sqm

TEST NUMBER: P688585

CATALOG NUMBER: SQ4R-PR1-100D-835-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.9	3.8
10°-20°	414.6	10.8
20°-30°	625.3	16.3
30°-40°	745.2	19.5
40°-50°	735.1	19.2
50°-60°	560.8	14.6
60°-70°	346.1	9.0
70°-80°	197.2	5.2
80°-90°	59.5	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°	1184.8	30.9
0°-40°	1930.1	50.4
0°-60°	3226.0	84.3
0°-90°	3828.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3828.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1532	1532	1532	1532	1532	
5°	1540	1522	1528	1522	1520	146
15°	1481	1466	1472	1467	1464	418
25°	1373	1356	1364	1350	1348	632
35°	1210	1195	1199	1183	1182	755
45°	979	966	962	944	942	751
55°	641	631	627	616	613	574
65°	344	342	346	343	343	347
75°	186	186	186	187	187	196
85°	48	50	53	53	53	56
90°	0	0	0	0	0	

TEST NUMBER: P688585

CATALOG NUMBER: SQ4R-PR1-100D-835-1-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1531.5	1531.5	1531.5	1531.5	1531.5
2.5°	1543.4	1526.3	1531.5	1527.6	1518.3
5°	1539.5	1522.3	1527.6	1522.3	1519.7
7.5°	1530.2	1513.1	1518.3	1513.1	1511.8
10°	1517.0	1501.2	1506.5	1501.2	1498.6
12.5°	1502.5	1485.4	1492.0	1485.4	1482.7
15°	1481.4	1465.6	1472.2	1466.9	1464.3
17.5°	1460.3	1443.2	1449.8	1444.5	1440.5
20°	1433.9	1418.1	1424.7	1415.5	1414.1
22.5°	1404.9	1389.1	1395.7	1382.5	1382.5
25°	1373.2	1356.1	1364.0	1349.5	1348.2
27.5°	1336.3	1320.5	1327.1	1312.6	1311.2
30°	1298.0	1282.2	1288.8	1273.0	1270.3
32.5°	1254.5	1240.0	1245.3	1229.5	1228.1
35°	1209.7	1195.2	1199.1	1183.3	1182.0
37.5°	1159.5	1146.3	1149.0	1131.8	1130.5
40°	1105.5	1092.3	1093.6	1075.1	1073.8
42.5°	1046.1	1032.9	1031.6	1013.1	1011.8
45°	978.8	965.6	961.7	944.5	941.9
47.5°	904.9	891.7	883.8	869.3	868.0
50°	823.2	810.0	803.4	791.5	787.5
52.5°	734.8	721.6	716.3	705.7	701.8
55°	641.1	630.6	626.6	616.0	613.4
57.5°	551.4	543.5	542.2	531.6	530.3
60°	470.9	467.0	467.0	457.7	457.7
62.5°	402.3	399.7	402.3	397.1	395.7
65°	344.3	341.7	345.6	343.0	343.0
67.5°	295.5	295.5	298.1	296.8	296.8
70°	255.9	255.9	257.2	257.2	257.2
72.5°	220.3	219.0	222.9	222.9	221.6
75°	186.0	186.0	186.0	187.3	187.3
77.5°	151.7	151.7	153.0	153.0	151.7
80°	117.4	118.7	118.7	117.4	117.4
82.5°	83.1	84.4	84.4	84.4	83.1
85°	47.5	50.1	52.8	52.8	52.8
87.5°	17.1	22.4	26.4	26.4	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)