

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: P688750

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688750
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_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3670.4 lumens
Efficiency: N/A
Efficacy: 79.4 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

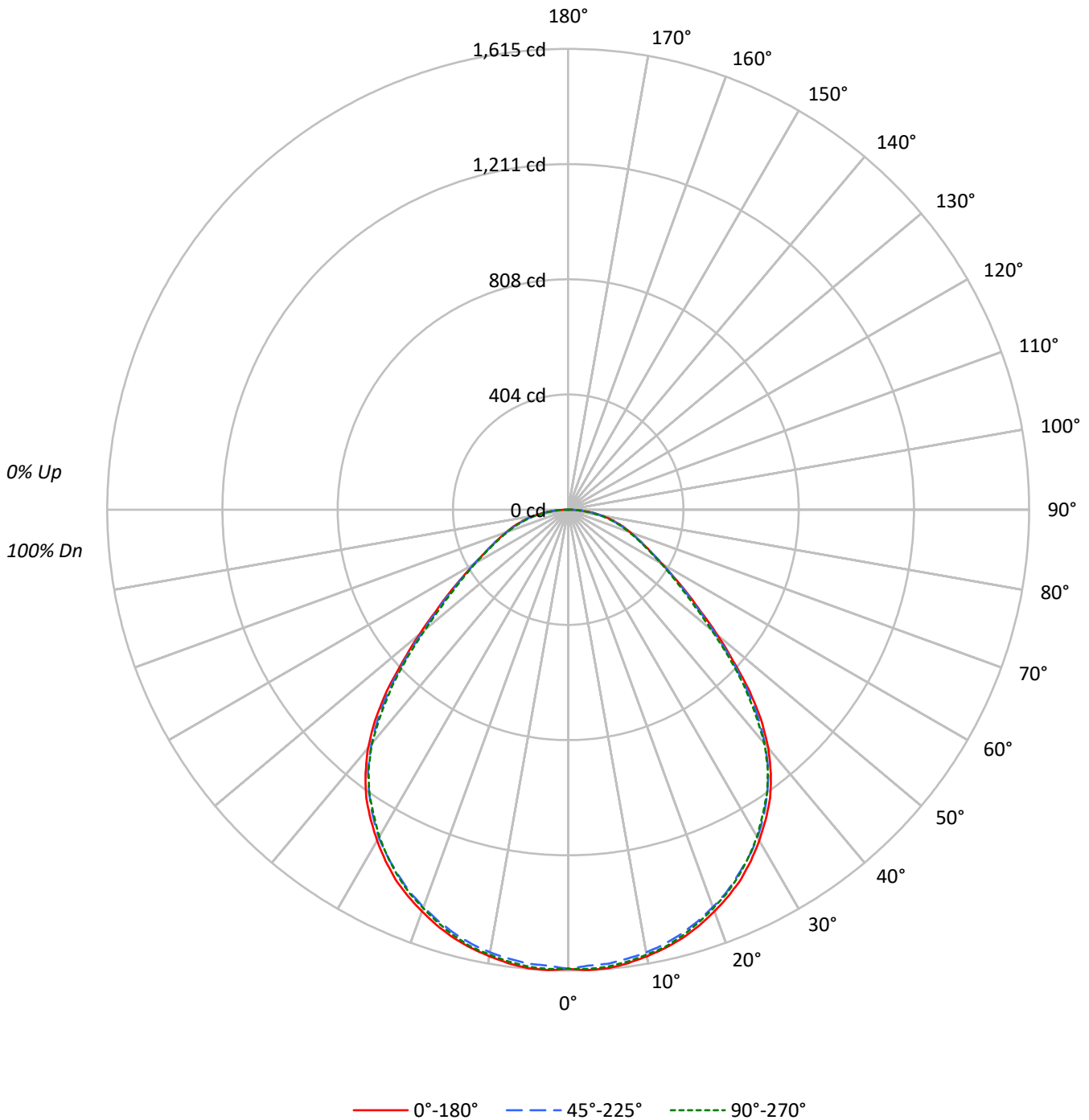
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688750

CATALOG NUMBER: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P688750

CATALOG NUMBER: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_3500K

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°	15491	15491	15491
5°	15589	15436	15531
10°	15536	15400	15478
15°	15484	15325	15404
20°	15345	15182	15223
25°	15194	14982	15025
30°	14884	14752	14707
35°	14498	14289	14266
40°	13706	13481	13431
45°	12225	11981	11847
50°	10206	9997	9789
55°	8503	8402	8203
60°	7305	7344	7192
65°	6697	6652	6561
70°	6485	6432	6319
75°	6576	6428	6283
80°	6609	6498	6276
85°	6363	6363	5921

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12225 cd/sqm

TEST NUMBER: P688750

CATALOG NUMBER: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	4.2
10°-20°	436.0	11.9
20°-30°	653.2	17.8
30°-40°	760.0	20.7
40°-50°	675.9	18.4
50°-60°	453.9	12.4
60°-70°	293.4	8.0
70°-80°	182.9	5.0
80°-90°	62.7	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°	1241.7	33.8
0°-40°	2001.7	54.5
0°-60°	3131.5	85.3
0°-90°	3670.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3670.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1609	1609	1609	1609	1609	
5°	1613	1609	1597	1609	1607	153
15°	1554	1550	1538	1548	1546	438
25°	1430	1424	1410	1418	1414	658
35°	1234	1228	1216	1216	1214	767
45°	898	894	880	868	870	686
55°	507	507	501	493	489	459
65°	294	296	292	290	288	295
75°	177	175	173	173	169	186
85°	58	60	58	56	54	64
90°	0	0	0	0	0	

TEST NUMBER: P688750

CATALOG NUMBER: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1609.1	1609.1	1609.1	1609.1	1609.1
2.5°	1615.0	1611.1	1599.2	1613.1	1611.1
5°	1613.1	1609.1	1597.2	1609.1	1607.1
7.5°	1603.1	1601.1	1587.2	1601.1	1597.2
10°	1589.2	1589.2	1575.3	1587.2	1583.3
12.5°	1573.3	1571.3	1559.4	1571.3	1569.4
15°	1553.5	1549.5	1537.6	1547.5	1545.5
17.5°	1527.6	1525.6	1511.7	1521.7	1517.7
20°	1497.8	1493.9	1481.9	1489.9	1485.9
22.5°	1466.1	1462.1	1450.2	1456.1	1454.1
25°	1430.3	1424.3	1410.4	1418.4	1414.4
27.5°	1386.6	1384.6	1370.7	1374.7	1370.7
30°	1338.9	1336.9	1327.0	1327.0	1323.0
32.5°	1287.3	1289.3	1273.4	1275.3	1267.4
35°	1233.6	1227.7	1215.8	1215.8	1213.8
37.5°	1166.1	1162.1	1152.2	1150.2	1148.2
40°	1090.6	1086.6	1072.7	1068.7	1068.7
42.5°	1001.2	997.2	983.3	977.4	969.4
45°	897.9	893.9	880.0	868.1	870.1
47.5°	782.7	786.7	772.8	762.8	760.8
50°	681.4	679.4	667.5	661.5	653.6
52.5°	584.0	586.0	576.1	572.1	562.2
55°	506.6	506.6	500.6	492.7	488.7
57.5°	437.0	441.0	435.0	431.1	427.1
60°	379.4	381.4	381.4	373.5	373.5
62.5°	331.7	333.7	331.7	327.8	327.8
65°	294.0	296.0	292.0	290.0	288.0
67.5°	260.2	262.2	260.2	258.2	254.3
70°	230.4	230.4	228.5	228.5	224.5
72.5°	204.6	202.6	200.6	200.6	198.7
75°	176.8	174.8	172.8	172.8	168.9
77.5°	149.0	147.0	147.0	143.0	141.0
80°	119.2	119.2	117.2	115.2	113.2
82.5°	91.4	89.4	87.4	85.4	83.4
85°	57.6	59.6	57.6	55.6	53.6
87.5°	25.8	27.8	27.8	27.8	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)