

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: P688670

Luminaire Tested: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688670
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PYRAMID 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: 3594.5 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.26 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

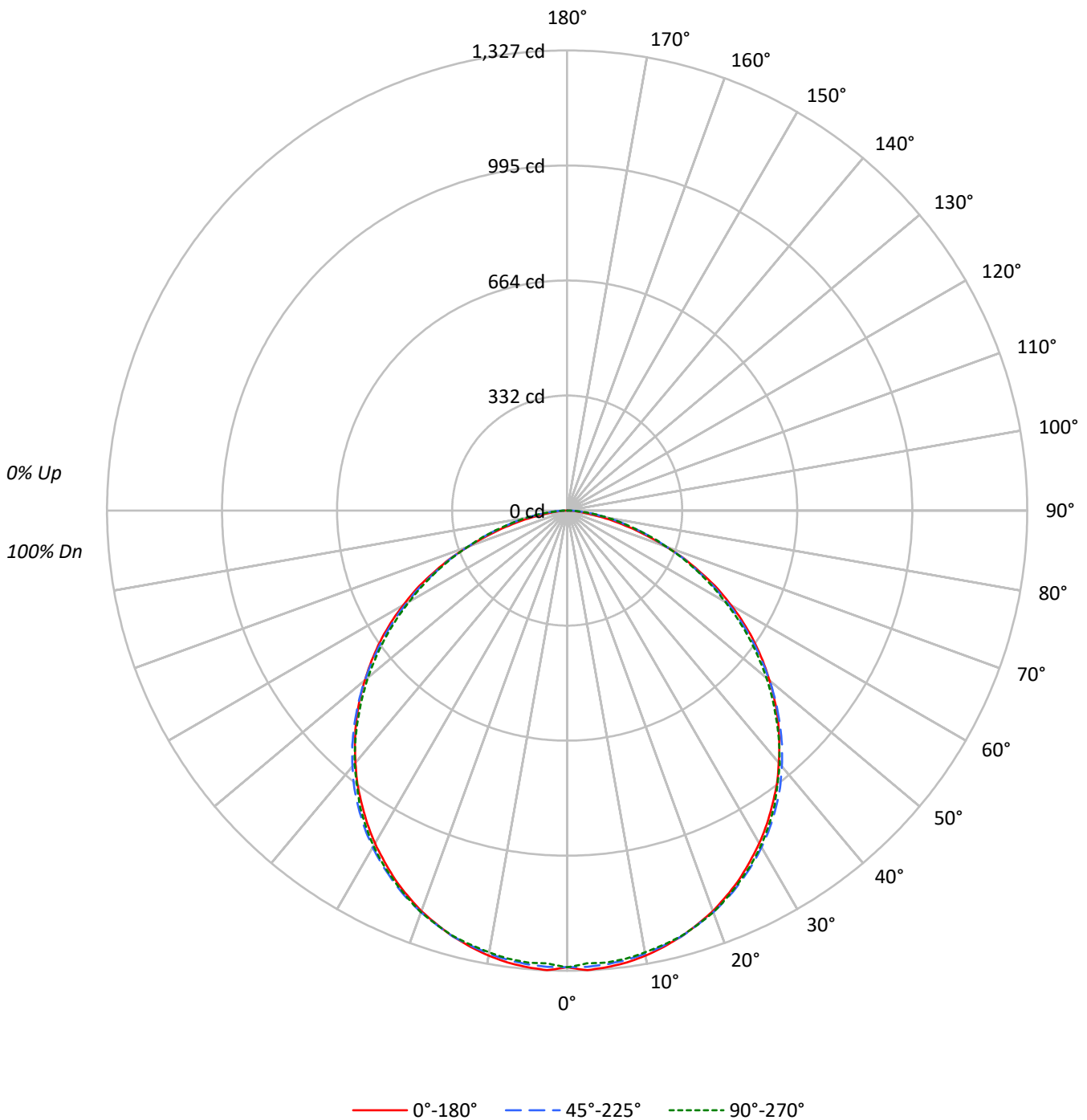
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P688670

CATALOG NUMBER: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P688670

CATALOG NUMBER: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K

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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85					85			
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12677	12677	12677
5°	12773	12691	12644
10°	12742	12682	12646
15°	12675	12675	12663
20°	12591	12629	12629
25°	12473	12563	12524
30°	12321	12470	12416
35°	12137	12324	12238
40°	11937	12105	11983
45°	11720	11803	11621
50°	11413	11413	11232
55°	11051	10908	10744
60°	10517	10307	10141
65°	9720	9527	9445
70°	8512	8580	8546
75°	6848	7573	7618
80°	4868	6420	6492
85°	2960	5391	5391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11803 cd/sqm

TEST NUMBER: P688670

CATALOG NUMBER: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	3.5
10°-20°	357.8	10.0
20°-30°	541.9	15.1
30°-40°	649.7	18.1
40°-50°	662.4	18.4
50°-60°	578.2	16.1
60°-70°	414.0	11.5
70°-80°	212.6	5.9
80°-90°	53.2	1.5
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°	1024.4	28.5
0°-40°	1674.1	46.6
0°-60°	2914.7	81.1
0°-90°	3594.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3594.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1322	1308	1313	1310	1308	126
15°	1272	1261	1272	1272	1270	359
25°	1174	1166	1183	1179	1179	541
35°	1033	1030	1049	1041	1041	646
45°	861	858	867	856	854	663
55°	658	650	650	640	640	587
65°	427	417	418	415	415	423
75°	184	193	204	205	205	198
85°	27	42	49	50	49	36
90°	0	0	0	0	0	

TEST NUMBER: P688670

CATALOG NUMBER: SQ4R-PC3-100D-92765-1-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.8	1316.8	1316.8	1316.8	1316.8
2.5°	1326.6	1311.9	1316.8	1313.2	1307.1
5°	1321.7	1308.3	1313.2	1309.5	1308.3
7.5°	1314.4	1301.0	1307.1	1304.6	1303.4
10°	1303.4	1290.0	1297.3	1294.9	1293.6
12.5°	1288.8	1276.6	1285.1	1282.7	1282.7
15°	1271.7	1260.7	1271.7	1271.7	1270.5
17.5°	1251.0	1241.2	1252.2	1253.4	1252.2
20°	1229.0	1218.1	1232.7	1231.5	1232.7
22.5°	1202.2	1193.7	1209.5	1205.9	1207.1
25°	1174.2	1165.6	1182.7	1179.0	1179.0
27.5°	1141.2	1135.1	1153.4	1149.8	1149.8
30°	1108.3	1102.2	1121.7	1116.9	1116.9
32.5°	1071.7	1068.1	1086.4	1080.3	1080.3
35°	1032.7	1030.3	1048.6	1041.3	1041.3
37.5°	993.7	991.3	1008.3	999.8	996.1
40°	949.8	948.6	963.2	953.5	953.5
42.5°	905.9	904.7	916.9	904.7	904.7
45°	860.8	858.4	866.9	855.9	853.5
47.5°	812.0	809.6	815.7	803.5	802.3
50°	762.0	759.6	762.0	751.1	749.9
52.5°	710.8	706.0	706.0	695.0	695.0
55°	658.4	649.9	649.9	640.1	640.1
57.5°	603.5	592.6	593.8	585.3	584.0
60°	546.2	534.0	535.3	527.9	526.7
62.5°	490.1	475.5	479.2	470.6	470.6
65°	426.7	417.0	418.2	414.6	414.6
67.5°	368.2	358.5	364.6	360.9	360.9
70°	302.4	296.3	304.8	304.8	303.6
72.5°	241.4	242.6	253.6	253.6	254.8
75°	184.1	192.6	203.6	204.8	204.8
77.5°	131.7	146.3	158.5	158.5	158.5
80°	87.8	104.9	115.8	118.3	117.1
82.5°	52.4	70.7	79.3	81.7	80.5
85°	26.8	41.5	48.8	50.0	48.8
87.5°	9.8	20.7	24.4	24.4	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)