

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P686316

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4_2700K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-125D-92765-1-UNV-STD-W-4_2700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500I
1250 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

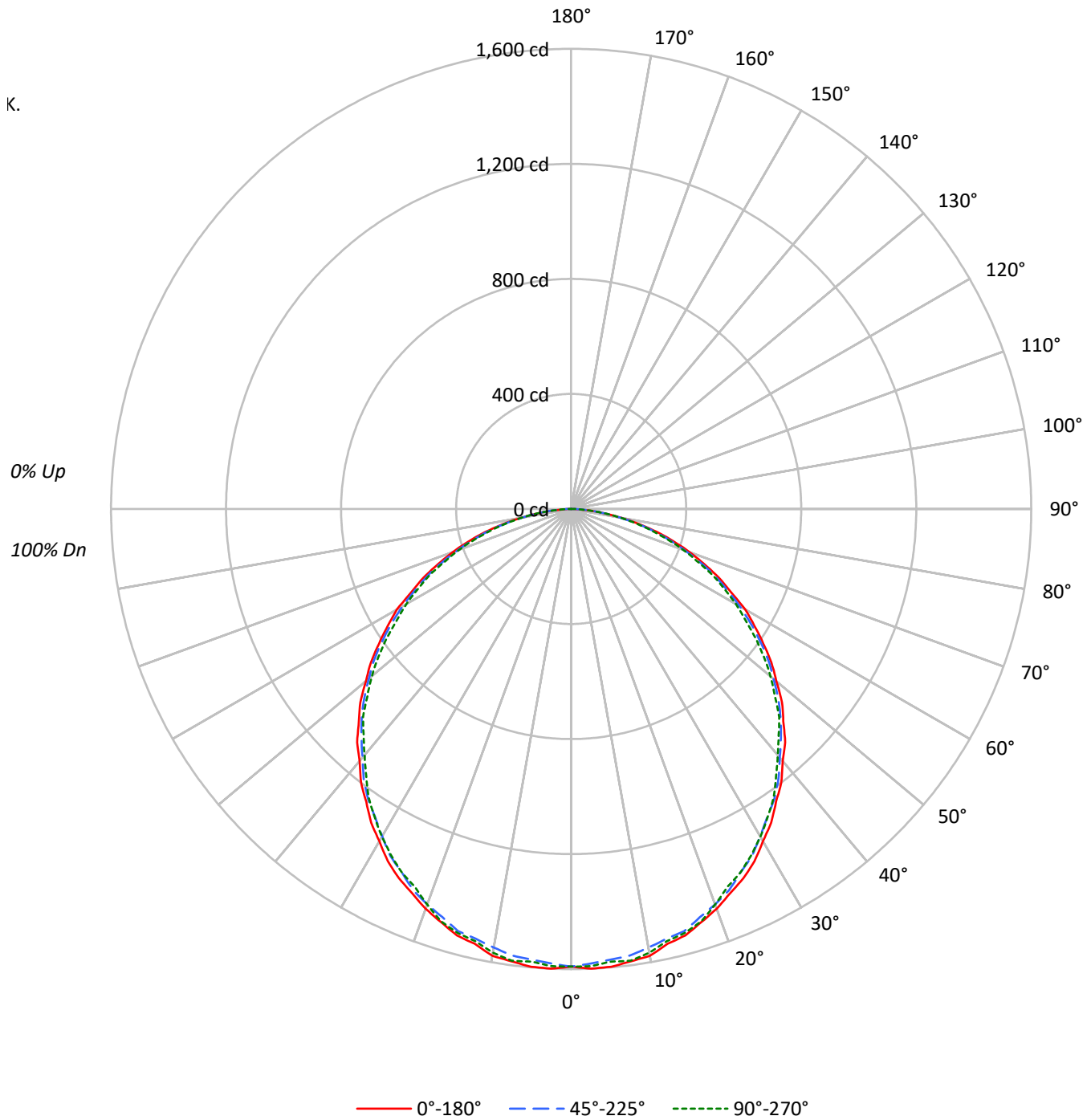
Lumens per Lamp: N/A
Luminaire Lumens: 4448.7 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 60.7
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



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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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59					59			
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50					50			
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43					43			
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38					38			
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15316	15316	15316
5°	15439	15202	15266
10°	15421	15137	15312
15°	15299	15144	15211
20°	15155	14994	14994
25°	15048	14810	14810
30°	14829	14605	14630
35°	14601	14469	14417
40°	14377	14181	14041
45°	14207	14024	13932
50°	13955	13754	13553
55°	13688	13463	13126
60°	13467	13035	12735
65°	12928	12572	12370
70°	12326	11825	11637
75°	11468	11055	10720
80°	9785	9536	9536
85°	7158	7401	7158

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 14237 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.7	3.4
10°-20°	429.8	9.7
20°-30°	645.8	14.5
30°-40°	771.0	17.3
40°-50°	795.5	17.9
50°-60°	716.5	16.1
60°-70°	545.1	12.3
70°-80°	312.9	7.0
80°-90°	81.4	1.8
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°	1226.3	27.6
0°-40°	1997.3	44.9
0°-60°	3509.3	78.9
0°-90°	4448.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4448.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1591	1591	1591	1591	1591	
5°	1598	1591	1573	1591	1580	152
15°	1535	1528	1519	1524	1526	432
25°	1417	1405	1394	1399	1394	652
35°	1242	1240	1231	1227	1227	779
45°	1044	1046	1030	1021	1023	806
55°	816	818	802	795	782	730
65°	568	561	552	541	543	560
75°	308	299	297	290	288	324
85°	65	67	67	67	65	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.9	1590.9	1590.9	1590.9	1590.9
2.5°	1599.8	1599.8	1581.9	1593.1	1590.9
5°	1597.6	1590.9	1573.0	1590.9	1579.7
7.5°	1586.4	1575.2	1566.3	1577.5	1584.2
10°	1577.5	1575.2	1548.4	1561.8	1566.3
12.5°	1548.4	1559.6	1530.5	1539.5	1539.5
15°	1535.0	1528.3	1519.4	1523.8	1526.1
17.5°	1506.0	1501.5	1488.1	1499.3	1503.7
20°	1479.2	1472.5	1463.5	1465.7	1463.5
22.5°	1445.6	1441.2	1434.5	1434.5	1421.1
25°	1416.6	1405.4	1394.2	1398.7	1394.2
27.5°	1380.8	1371.9	1360.7	1363.0	1356.3
30°	1333.9	1336.2	1313.8	1313.8	1316.0
32.5°	1293.7	1284.8	1269.1	1269.1	1271.4
35°	1242.3	1240.1	1231.1	1226.7	1226.7
37.5°	1199.9	1199.9	1184.2	1177.5	1170.8
40°	1144.0	1146.2	1128.4	1126.1	1117.2
42.5°	1101.5	1097.1	1079.2	1077.0	1068.0
45°	1043.5	1045.7	1030.0	1021.1	1023.3
47.5°	994.3	987.6	976.4	967.5	960.8
50°	931.7	929.5	918.3	911.6	904.9
52.5°	878.1	871.4	864.7	849.1	844.6
55°	815.5	817.8	802.1	795.4	782.0
57.5°	755.2	753.0	739.6	728.4	717.2
60°	699.4	692.7	677.0	665.8	661.4
62.5°	625.6	623.4	612.2	603.3	598.8
65°	567.5	560.8	551.9	540.7	543.0
67.5°	500.5	496.0	487.1	478.2	473.7
70°	437.9	431.2	420.1	415.6	413.4
72.5°	373.1	366.4	357.5	348.6	350.8
75°	308.3	299.4	297.2	290.5	288.2
77.5°	241.3	236.8	232.4	230.1	227.9
80°	176.5	178.7	172.0	169.8	172.0
82.5°	120.7	120.7	118.4	116.2	118.4
85°	64.8	67.0	67.0	67.0	64.8
87.5°	22.3	26.8	29.0	29.0	26.8
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	21.31	22.95	21.67	23.26	23.58	21.07	22.71	21.43	23.02	23.33
	3H	23.14	24.63	23.52	24.95	25.31	22.87	24.35	23.25	24.68	25.04
	4H	23.83	25.23	24.23	25.58	25.95	23.54	24.94	23.94	25.28	25.66
	6H	24.32	25.61	24.73	25.98	26.37	24.03	25.32	24.44	25.69	26.08
	8H	24.46	25.70	24.89	26.09	26.49	24.17	25.41	24.60	25.80	26.20
	12H	24.54	25.73	24.97	26.11	26.54	24.26	25.45	24.69	25.83	26.26
4H	2H	21.92	23.32	22.32	23.67	24.04	21.73	23.13	22.13	23.48	23.85
	3H	23.97	25.15	24.38	25.54	25.94	23.75	24.92	24.16	25.32	25.72
	4H	24.79	25.85	25.22	26.26	26.70	24.54	25.61	24.98	26.02	26.45
	6H	25.40	26.33	25.86	26.77	27.22	25.15	26.08	25.60	26.52	26.97
	8H	25.59	26.46	26.05	26.90	27.37	25.34	26.21	25.80	26.65	27.12
	12H	25.71	26.49	26.19	26.97	27.43	25.47	26.25	25.95	26.72	27.19
8H	4H	25.09	25.95	25.55	26.40	26.86	24.87	25.74	25.33	26.18	26.65
	6H	25.82	26.54	26.31	27.02	27.50	25.59	26.31	26.08	26.80	27.27
	8H	26.07	26.72	26.58	27.23	27.71	25.85	26.50	26.36	27.00	27.49
	12H	26.25	26.83	26.76	27.32	27.88	26.04	26.61	26.54	27.10	27.66
12H	4H	25.12	25.90	25.60	26.37	26.84	24.91	25.69	25.39	26.16	26.63
	6H	25.86	26.51	26.37	27.02	27.50	25.65	26.29	26.15	26.80	27.29
	8H	26.18	26.75	26.68	27.24	27.80	25.96	26.53	26.47	27.02	27.58