

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: P686323

Luminaire Tested: SQ4R-F-125D-92765-1-UNV-STD-W-4_6500K

Issue Date: 5/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P686323
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_6500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS, WHITE TUNING 2700K-6500K
1250 LUMENS PER FOOT
Light Source: 2700K AND 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

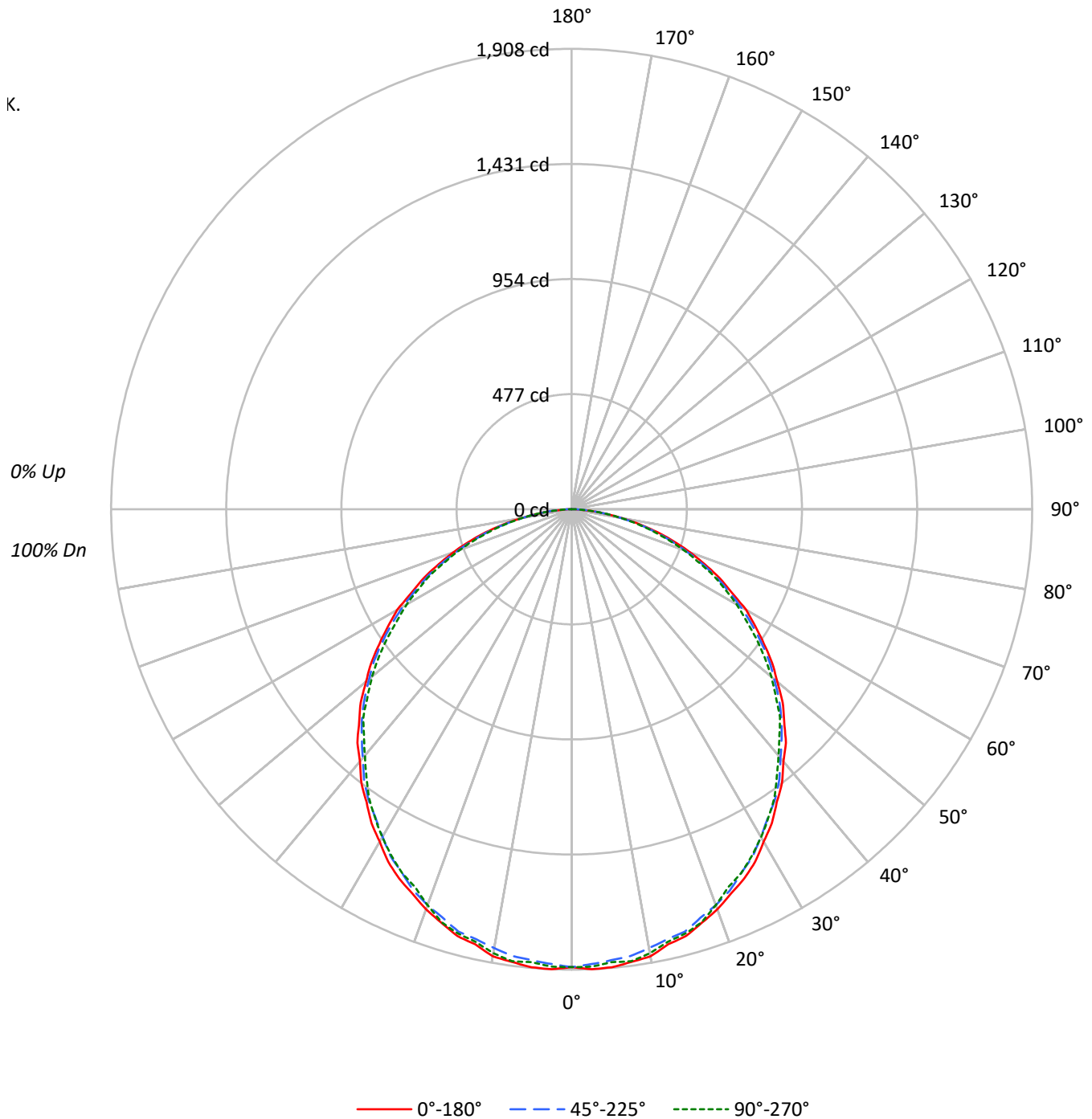
Lumens per Lamp: N/A
Luminaire Lumens: 5305.8 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.2
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



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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	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°	18267	18267	18267
5°	18413	18130	18207
10°	18392	18053	18261
15°	18247	18061	18141
20°	18074	17883	17883
25°	17947	17663	17663
30°	17686	17419	17449
35°	17413	17257	17194
40°	17147	16912	16745
45°	16944	16726	16617
50°	16643	16403	16165
55°	16327	16058	15655
60°	16060	15546	15188
65°	15420	14994	14752
70°	14702	14102	13877
75°	13677	13183	12788
80°	11670	11377	11377
85°	8539	8826	8539

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 16979 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	3.4
10°-20°	512.6	9.7
20°-30°	770.3	14.5
30°-40°	919.5	17.3
40°-50°	948.8	17.9
50°-60°	854.5	16.1
60°-70°	650.1	12.3
70°-80°	373.2	7.0
80°-90°	97.1	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°	1462.5	27.6
0°-40°	2382.1	44.9
0°-60°	4185.3	78.9
0°-90°	5305.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5305.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1897	1897	1897	1897	1897	
5°	1905	1897	1876	1897	1884	181
15°	1831	1823	1812	1817	1820	515
25°	1690	1676	1663	1668	1663	777
35°	1482	1479	1468	1463	1463	929
45°	1244	1247	1228	1218	1220	962
55°	973	975	957	949	933	871
65°	677	669	658	645	648	668
75°	368	357	354	346	344	387
85°	77	80	80	80	77	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1897.4	1897.4	1897.4	1897.4	1897.4
2.5°	1908.0	1908.0	1886.7	1900.0	1897.4
5°	1905.3	1897.4	1876.0	1897.4	1884.0
7.5°	1892.0	1878.7	1868.0	1881.4	1889.4
10°	1881.4	1878.7	1846.7	1862.7	1868.0
12.5°	1846.7	1860.0	1825.4	1836.1	1836.1
15°	1830.7	1822.7	1812.1	1817.4	1820.1
17.5°	1796.1	1790.8	1774.8	1788.1	1793.4
20°	1764.1	1756.1	1745.5	1748.1	1745.5
22.5°	1724.1	1718.8	1710.8	1710.8	1694.8
25°	1689.5	1676.2	1662.8	1668.2	1662.8
27.5°	1646.9	1636.2	1622.9	1625.5	1617.5
30°	1590.9	1593.6	1566.9	1566.9	1569.6
32.5°	1542.9	1532.3	1513.6	1513.6	1516.3
35°	1481.6	1479.0	1468.3	1463.0	1463.0
37.5°	1431.0	1431.0	1412.4	1404.4	1396.4
40°	1364.4	1367.1	1345.7	1343.1	1332.4
42.5°	1313.8	1308.4	1287.1	1284.4	1273.8
45°	1244.5	1247.1	1228.5	1217.8	1220.5
47.5°	1185.8	1177.9	1164.5	1153.9	1145.9
50°	1111.2	1108.6	1095.2	1087.2	1079.3
52.5°	1047.3	1039.3	1031.3	1012.6	1007.3
55°	972.7	975.3	956.7	948.7	932.7
57.5°	900.7	898.0	882.1	868.7	855.4
60°	834.1	826.1	807.4	794.1	788.8
62.5°	746.2	743.5	730.2	719.5	714.2
65°	676.9	668.9	658.2	644.9	647.6
67.5°	596.9	591.6	580.9	570.3	564.9
70°	522.3	514.3	501.0	495.7	493.0
72.5°	445.0	437.0	426.4	415.7	418.4
75°	367.7	357.1	354.4	346.4	343.8
77.5°	287.8	282.5	277.1	274.5	271.8
80°	210.5	213.2	205.2	202.5	205.2
82.5°	143.9	143.9	141.2	138.6	141.2
85°	77.3	79.9	79.9	79.9	77.3
87.5°	26.6	32.0	34.6	34.6	32.0
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	21.92	23.56	22.29	23.87	24.19	21.68	23.32	22.04	23.63	23.95
	3H	23.76	25.24	24.13	25.57	25.93	23.48	24.97	23.86	25.29	25.65
	4H	24.44	25.84	24.84	26.19	26.56	24.15	25.55	24.55	25.90	26.27
	6H	24.93	26.23	25.34	26.59	26.98	24.64	25.93	25.05	26.30	26.69
	8H	25.07	26.31	25.50	26.70	27.10	24.79	26.03	25.21	26.41	26.81
	12H	25.15	26.34	25.58	26.72	27.15	24.87	26.06	25.30	26.44	26.87
4H	2H	22.53	23.93	22.93	24.28	24.65	22.34	23.74	22.74	24.09	24.46
	3H	24.59	25.76	25.00	26.16	26.56	24.36	25.53	24.77	25.93	26.33
	4H	25.40	26.46	25.83	26.87	27.31	25.16	26.22	25.59	26.63	27.07
	6H	26.01	26.94	26.47	27.38	27.84	25.76	26.69	26.22	27.13	27.59
	8H	26.20	27.07	26.66	27.51	27.98	25.96	26.82	26.42	27.27	27.73
	12H	26.32	27.10	26.80	27.58	28.05	26.08	26.86	26.56	27.34	27.81
8H	4H	25.70	26.57	26.16	27.01	27.47	25.48	26.35	25.94	26.79	27.26
	6H	26.43	27.15	26.92	27.64	28.11	26.20	26.92	26.69	27.41	27.89
	8H	26.69	27.33	27.19	27.84	28.33	26.46	27.11	26.97	27.62	28.10
	12H	26.87	27.44	27.37	27.93	28.49	26.65	27.22	27.16	27.71	28.27
12H	4H	25.73	26.51	26.21	26.98	27.45	25.52	26.30	26.00	26.77	27.24
	6H	26.48	27.12	26.98	27.63	28.12	26.26	26.91	26.77	27.41	27.90
	8H	26.79	27.36	27.29	27.85	28.41	26.57	27.15	27.08	27.64	28.20