

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: P688520

Luminaire Tested: SQ4R-PH1-125D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688520
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-PH1-125D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

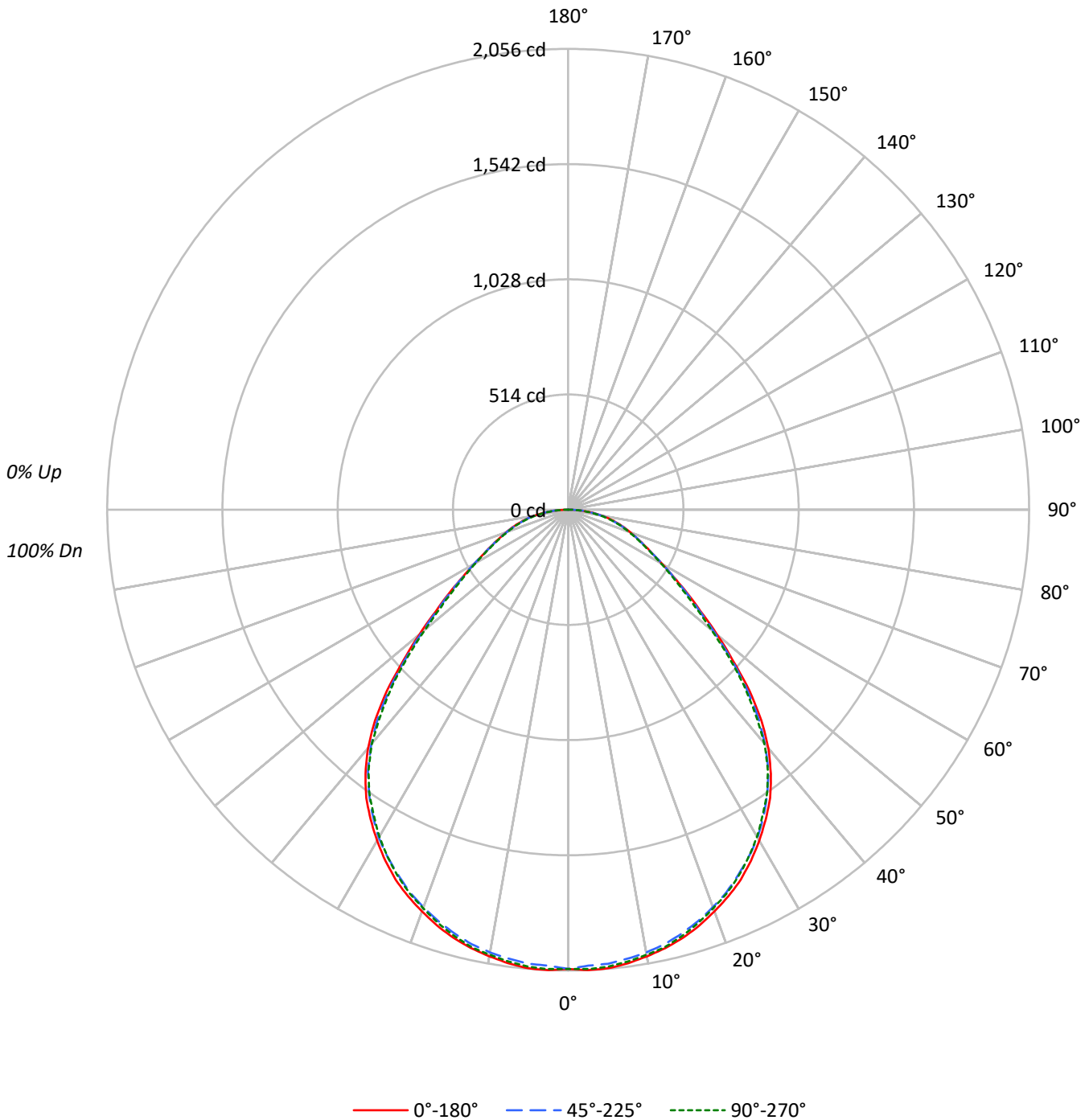
Lumens per Lamp: N/A
Luminaire Lumens: 4673.3 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 49.5
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	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°	19724	19724	19724
5°	19848	19652	19775
10°	19780	19607	19706
15°	19714	19512	19613
20°	19539	19331	19383
25°	19345	19076	19129
30°	18951	18783	18726
35°	18460	18192	18163
40°	17451	17165	17102
45°	15565	15256	15083
50°	12993	12728	12463
55°	10826	10699	10443
60°	9302	9350	9156
65°	8527	8470	8354
70°	8259	8188	8045
75°	8373	8183	7997
80°	8416	8272	7995
85°	8097	8097	7545

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15565 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.3	4.2
10°-20°	555.1	11.9
20°-30°	831.6	17.8
30°-40°	967.6	20.7
40°-50°	860.6	18.4
50°-60°	577.9	12.4
60°-70°	373.5	8.0
70°-80°	232.8	5.0
80°-90°	79.8	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°	1581.0	33.8
0°-40°	2548.7	54.5
0°-60°	3987.1	85.3
0°-90°	4673.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4673.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2054	2049	2034	2049	2046	195
15°	1978	1973	1958	1970	1968	558
25°	1821	1814	1796	1806	1801	837
35°	1571	1563	1548	1548	1545	976
45°	1143	1138	1120	1105	1108	874
55°	645	645	637	627	622	584
65°	374	377	372	369	367	375
75°	225	223	220	220	215	237
85°	73	76	73	71	68	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2048.7	2048.7	2048.7	2048.7	2048.7
2.5°	2056.3	2051.2	2036.1	2053.8	2051.2
5°	2053.8	2048.7	2033.5	2048.7	2046.2
7.5°	2041.1	2038.6	2020.9	2038.6	2033.5
10°	2023.4	2023.4	2005.7	2020.9	2015.8
12.5°	2003.2	2000.7	1985.5	2000.7	1998.1
15°	1977.9	1972.8	1957.7	1970.3	1967.8
17.5°	1945.0	1942.5	1924.8	1937.4	1932.4
20°	1907.1	1902.0	1886.8	1897.0	1891.9
22.5°	1866.6	1861.6	1846.4	1854.0	1851.4
25°	1821.1	1813.5	1795.8	1805.9	1800.8
27.5°	1765.4	1762.9	1745.2	1750.3	1745.2
30°	1704.7	1702.2	1689.6	1689.6	1684.5
32.5°	1639.0	1641.5	1621.3	1623.8	1613.7
35°	1570.7	1563.1	1547.9	1547.9	1545.4
37.5°	1484.7	1479.6	1467.0	1464.5	1461.9
40°	1388.6	1383.5	1365.8	1360.8	1360.8
42.5°	1274.8	1269.7	1252.0	1244.4	1234.3
45°	1143.2	1138.2	1120.5	1105.3	1107.8
47.5°	996.5	1001.6	983.9	971.2	968.7
50°	867.5	865.0	849.8	842.3	832.1
52.5°	743.6	746.1	733.5	728.4	715.8
55°	645.0	645.0	637.4	627.3	622.2
57.5°	556.4	561.5	553.9	548.9	543.8
60°	483.1	485.6	485.6	475.5	475.5
62.5°	422.4	424.9	422.4	417.3	417.3
65°	374.3	376.9	371.8	369.3	366.7
67.5°	331.3	333.9	331.3	328.8	323.7
70°	293.4	293.4	290.9	290.9	285.8
72.5°	260.5	258.0	255.5	255.5	252.9
75°	225.1	222.6	220.0	220.0	215.0
77.5°	189.7	187.2	187.2	182.1	179.6
80°	151.8	151.8	149.2	146.7	144.2
82.5°	116.3	113.8	111.3	108.8	106.2
85°	73.3	75.9	73.3	70.8	68.3
87.5°	32.9	35.4	35.4	35.4	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)