

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: P845602

Luminaire Tested: SQ2R-PP3-100D-835-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845602
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PP3-100D-835-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

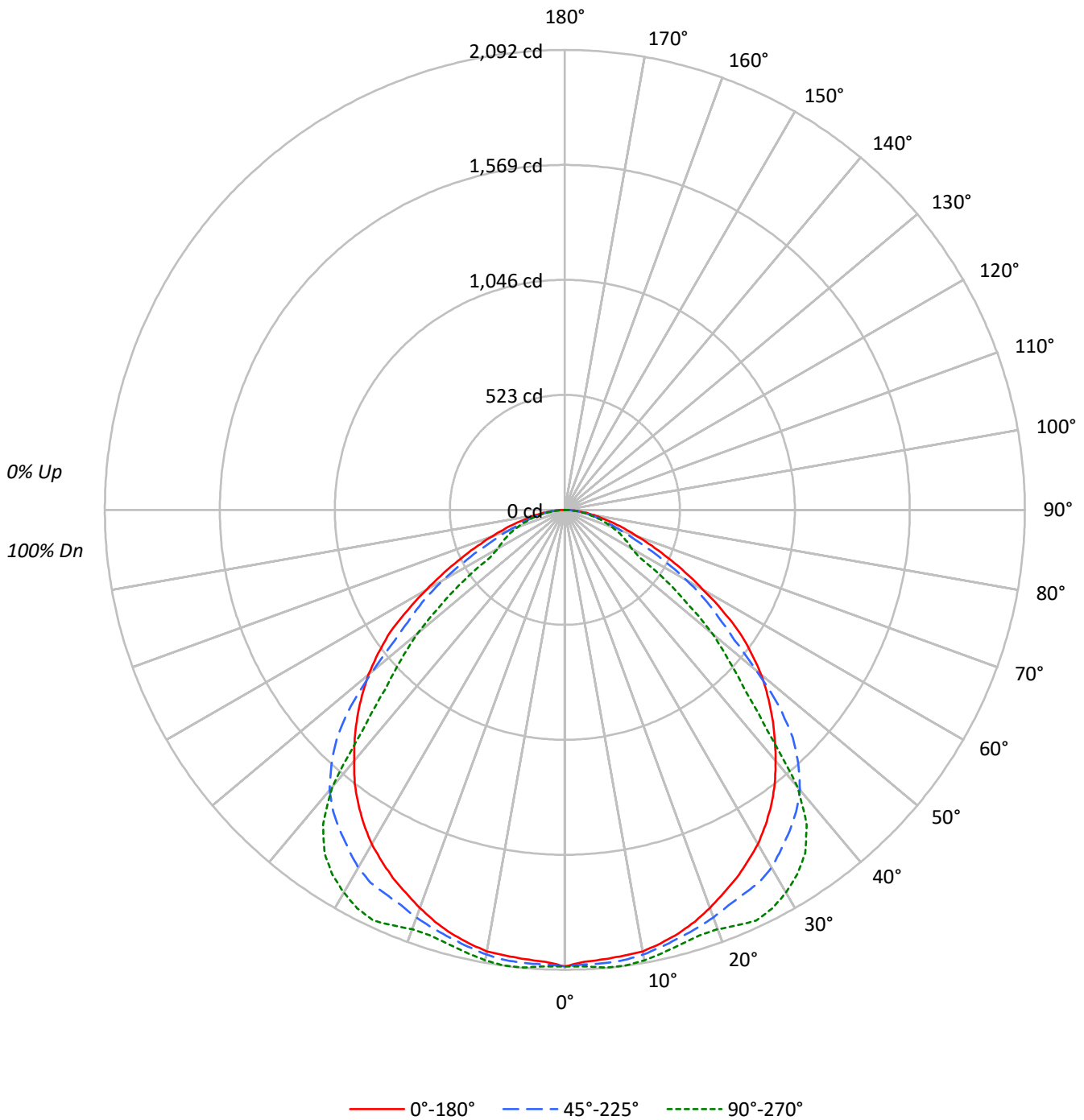
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5230.3 lumens
Efficiency: N/A
Efficacy: 139.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9969
Total Harmonic Distortion (THDi): 0.066
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	33525	33525	33525
5°	33263	33546	33867
10°	33431	33683	34115
15°	33351	33682	34195
20°	33113	33904	34885
25°	32924	34333	36717
30°	32736	35029	37485
35°	32274	35130	37552
40°	31413	35068	34697
45°	30472	33479	26412
50°	29276	28560	21999
55°	27249	24034	15817
60°	23460	20625	11341
65°	19790	15931	11152
70°	16475	12538	10674
75°	13967	10817	9994
80°	11836	9391	8982
85°	9355	7725	4872

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 33479 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	197.8	3.8
10°-20°	572.4	10.9
20°-30°	897.0	17.2
30°-40°	1107.6	21.2
40°-50°	1042.7	19.9
50°-60°	737.1	14.1
60°-70°	418.8	8.0
70°-80°	207.4	4.0
80°-90°	49.5	0.9
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°	1667.2	31.9
0°-40°	2774.8	53.1
0°-60°	4554.6	87.1
0°-90°	5230.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5230.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	2052	2090	2070	2074	2090	196
15°	1995	2024	2015	2035	2046	563
25°	1848	1896	1927	2004	2061	852
35°	1637	1684	1782	1883	1905	1022
45°	1334	1438	1466	1244	1157	1028
55°	968	1027	854	645	562	855
65°	518	546	417	294	292	519
75°	224	248	173	162	160	241
85°	50	46	42	33	26	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2076.4	2076.4	2076.4	2076.4	2076.4
2.5°	2056.7	2094.0	2069.8	2074.2	2078.6
5°	2052.3	2089.6	2069.8	2074.2	2089.6
7.5°	2045.7	2085.2	2065.4	2072.0	2091.8
10°	2039.1	2072.0	2054.5	2065.4	2080.8
12.5°	2019.3	2050.1	2034.7	2050.1	2063.2
15°	1995.2	2023.7	2015.0	2034.7	2045.7
17.5°	1964.5	1997.4	1995.2	2021.5	2030.3
20°	1927.2	1968.9	1973.2	2008.4	2030.3
22.5°	1887.6	1938.1	1946.9	2004.0	2045.7
25°	1848.1	1896.4	1927.2	2004.0	2061.0
27.5°	1802.0	1850.3	1911.8	1997.4	2043.5
30°	1755.9	1802.0	1878.9	1968.9	2010.6
32.5°	1698.9	1747.2	1830.6	1929.3	1966.7
35°	1637.4	1683.5	1782.3	1883.3	1905.2
37.5°	1569.4	1617.7	1729.6	1797.7	1806.4
40°	1490.4	1558.4	1663.8	1674.7	1646.2
42.5°	1413.5	1505.7	1571.6	1514.5	1363.1
45°	1334.5	1437.7	1466.2	1244.5	1156.7
47.5°	1251.1	1354.3	1321.4	1071.1	1009.7
50°	1165.5	1262.1	1137.0	932.8	875.8
52.5°	1068.9	1152.3	972.4	801.2	706.8
55°	968.0	1027.2	853.8	645.3	561.9
57.5°	847.2	891.1	752.9	507.0	401.7
60°	726.5	759.4	638.7	397.3	351.2
62.5°	616.8	645.3	520.2	331.4	322.7
65°	518.0	546.5	417.0	294.1	291.9
67.5°	428.0	458.7	333.6	263.4	261.2
70°	349.0	381.9	265.6	230.5	226.1
72.5°	283.1	313.9	215.1	195.3	193.2
75°	223.9	248.0	173.4	162.4	160.2
77.5°	171.2	188.8	136.1	129.5	127.3
80°	127.3	133.9	101.0	98.8	96.6
82.5°	87.8	83.4	70.2	68.0	63.7
85°	50.5	46.1	41.7	32.9	26.3
87.5°	19.8	19.8	8.8	6.6	6.6
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	23.65	25.17	24.01	25.49	25.80	20.05	21.58	20.42	21.89	22.20
	3H	24.80	26.16	25.17	26.48	26.85	21.20	22.57	21.58	22.89	23.26
	4H	25.17	26.44	25.57	26.79	27.17	21.70	22.97	22.10	23.32	23.70
	6H	25.41	26.59	25.83	26.96	27.35	22.07	23.25	22.49	23.62	24.01
	8H	25.48	26.60	25.91	26.99	27.39	22.18	23.30	22.60	23.69	24.09
	12H	25.52	26.59	25.95	26.97	27.40	22.21	23.28	22.64	23.66	24.09
4H	2H	23.84	25.11	24.24	25.46	25.84	20.84	22.12	21.24	22.47	22.85
	3H	25.21	26.26	25.62	26.66	27.06	22.15	23.20	22.56	23.60	24.01
	4H	25.71	26.65	26.14	27.07	27.51	22.73	23.68	23.16	24.09	24.53
	6H	26.08	26.90	26.54	27.34	27.80	23.20	24.03	23.66	24.47	24.93
	8H	26.18	26.95	26.65	27.39	27.86	23.34	24.10	23.80	24.55	25.02
	12H	26.25	26.93	26.73	27.41	27.88	23.39	24.08	23.88	24.56	25.03
8H	4H	25.77	26.54	26.23	26.98	27.45	23.05	23.82	23.51	24.26	24.73
	6H	26.22	26.86	26.72	27.35	27.83	23.62	24.25	24.11	24.74	25.22
	8H	26.38	26.95	26.89	27.46	27.95	23.80	24.37	24.32	24.88	25.37
	12H	26.49	27.00	27.00	27.49	28.06	23.90	24.41	24.41	24.90	25.47
12H	4H	25.76	26.44	26.24	26.92	27.39	23.09	23.77	23.57	24.25	24.72
	6H	26.21	26.78	26.73	27.29	27.78	23.67	24.24	24.18	24.75	25.24
	8H	26.41	26.92	26.92	27.41	27.97	23.90	24.41	24.41	24.90	25.47