

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: P854343

Luminaire Tested: SQ2-WBM-050U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854343  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G3-2104-222-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-050U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

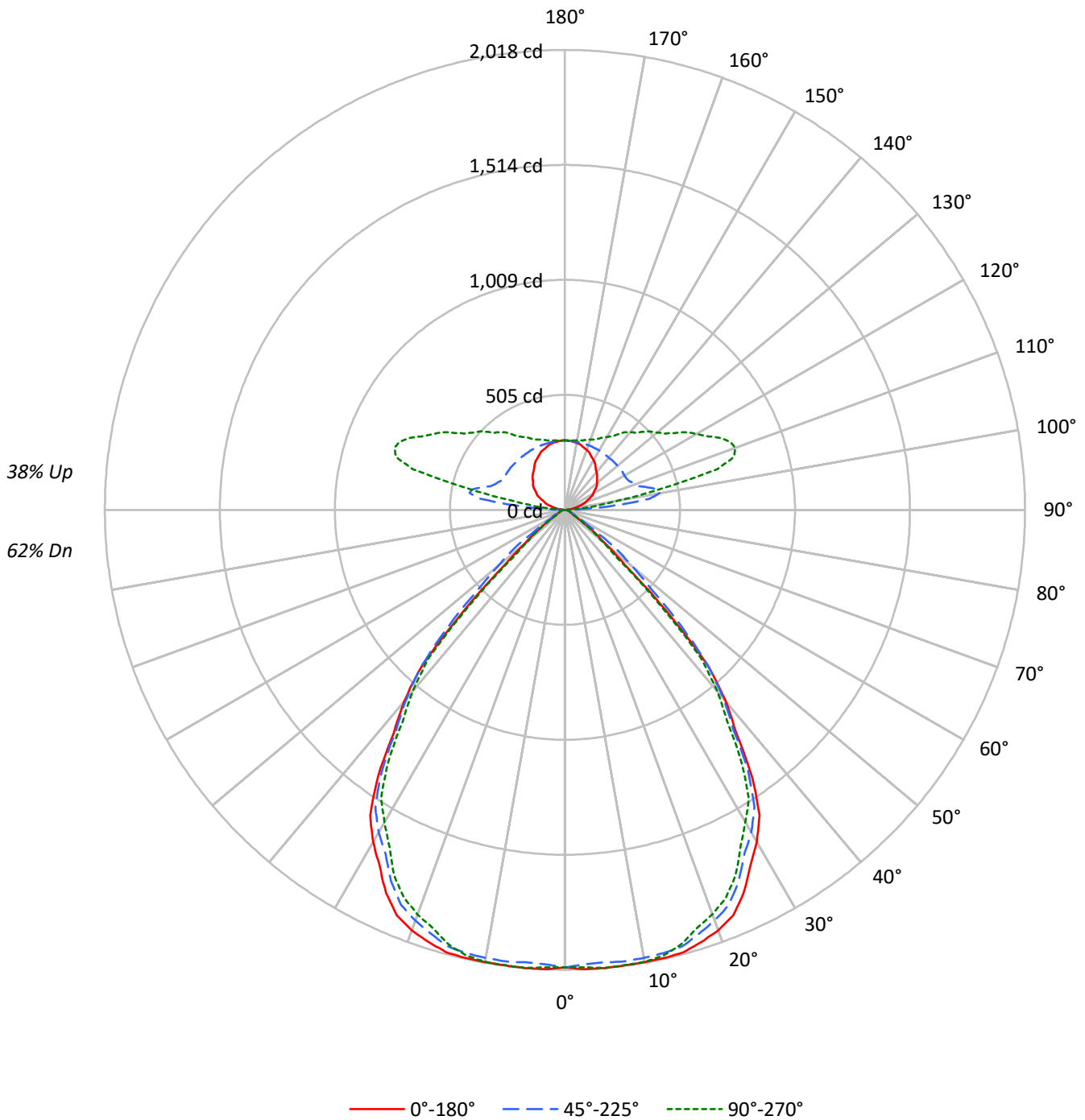
Lumens per Lamp: N/A  
Luminaire Lumens: 5031.0 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 42.4  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	62
1	103	99	96	93	96	93	91	88	82	81	79	72	71	70	63	62	61	57
2	96	89	84	80	90	84	80	76	75	72	69	66	64	62	59	57	55	52
3	89	81	75	70	83	77	71	67	69	64	61	61	58	55	54	52	50	47
4	83	73	67	61	78	70	64	59	63	58	54	56	53	50	50	47	45	42
5	77	67	60	55	72	64	57	53	57	52	49	52	48	45	46	43	41	38
6	72	61	54	49	68	58	52	47	53	48	44	48	44	41	43	40	37	35
7	67	56	49	44	63	53	47	42	49	43	40	44	40	37	40	37	34	32
8	63	51	44	40	59	49	43	38	45	40	36	41	37	34	37	34	31	29
9	59	48	41	36	55	46	39	35	42	37	33	38	34	31	35	31	29	27
10	55	44	37	33	52	42	36	32	39	34	30	36	31	28	32	29	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	32411	32411	32411
5°	32707	32302	32692
10°	33037	32723	33023
15°	33588	33153	32991
20°	33747	32953	32459
25°	33054	32076	31545
30°	31362	30464	29496
35°	28206	27618	26613
40°	23123	22778	21905
45°	14458	16459	13579
50°	5657	9595	5172
55°	2790	4470	2764
60°	1305	2144	1182
65°	1177	1249	1104
70°	1138	1180	1090
75°	1142	1142	1023
80°	1069	1069	986
85°	1074	889	889

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 16459 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.9	3.8
10°-20°	561.2	11.2
20°-30°	829.8	16.5
30°-40°	858.6	17.1
40°-50°	516.4	10.3
50°-60°	123.6	2.5
60°-70°	33.8	0.7
70°-80°	18.9	0.4
80°-90°	6.3	0.1
90°-100°	121.3	2.4
100°-110°	384.6	7.6
110°-120°	377.1	7.5
120°-130°	306.9	6.1
130°-140°	250.2	5.0
140°-150°	195.1	3.9
150°-160°	140.6	2.8
160°-170°	85.9	1.7
170°-180°	29.0	0.6
0°-30°	1582.9	31.5
0°-40°	2441.5	48.5
0°-60°	3081.5	61.2
0°-90°	3140.5	62.4
90°-120°	883.0	17.6
90°-150°	1635.1	32.5
90°-180°	1891.0	37.6
0°-180°	5031.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2007	2007	2007	2007	2007	
5°	2018	2011	1993	2020	2017	192
15°	2009	2024	1983	1983	1974	566
25°	1855	1870	1800	1781	1771	848
35°	1431	1429	1401	1369	1350	878
45°	633	719	721	685	595	490
55°	99	111	159	106	98	99
65°	31	32	33	31	29	31
75°	18	18	18	17	16	19
85°	6	6	5	5	5	6
90°	0	1	3	3	3	1
95°	16	49	220	82	53	19
105°	67	94	379	722	692	71
115°	120	142	306	636	749	118
125°	166	185	302	499	588	147
135°	200	220	300	429	483	154
145°	234	251	300	370	403	146
155°	266	276	301	331	344	123
165°	290	293	302	313	316	82
175°	304	302	304	305	304	29
180°	304	304	304	304	304	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2007.4	2007.4	2007.4	2007.4	2007.4
2.5°	2017.4	2012.2	1995.9	2012.7	2009.0
5°	2018.0	2011.4	1993.0	2019.9	2017.1
7.5°	2015.9	2013.1	1999.0	2019.3	2014.9
10°	2015.1	2016.1	1995.9	2017.0	2014.2
12.5°	2014.4	2022.1	1992.8	2009.2	2002.6
15°	2009.4	2024.4	1983.4	1983.2	1973.7
17.5°	1988.0	2005.9	1951.0	1936.0	1924.5
20°	1964.1	1982.0	1917.9	1893.8	1889.1
22.5°	1926.4	1945.8	1877.1	1850.6	1842.9
25°	1855.4	1870.4	1800.5	1781.0	1770.7
27.5°	1760.7	1769.0	1703.3	1681.1	1666.8
30°	1682.2	1685.9	1634.0	1604.7	1582.1
32.5°	1589.0	1592.8	1547.0	1519.3	1501.2
35°	1431.0	1429.1	1401.2	1369.0	1350.2
37.5°	1233.3	1236.0	1213.9	1188.4	1169.4
40°	1097.1	1098.9	1080.7	1044.0	1039.3
42.5°	930.8	959.0	934.4	905.8	883.8
45°	633.2	718.8	720.8	685.1	594.7
47.5°	357.6	455.1	511.4	408.8	299.1
50°	225.2	291.1	382.0	242.6	205.9
52.5°	159.7	193.2	288.1	170.7	151.3
55°	99.1	111.4	158.8	105.7	98.2
57.5°	58.9	71.5	90.3	71.5	59.7
60°	40.4	50.8	66.4	46.9	36.6
62.5°	35.0	39.4	52.5	37.1	33.5
65°	30.8	31.7	32.7	30.8	28.9
67.5°	27.1	28.1	27.3	27.1	25.4
70°	24.1	25.0	25.0	24.0	23.1
72.5°	21.7	22.7	21.9	21.7	20.0
75°	18.3	18.3	18.3	17.3	16.4
77.5°	13.9	14.8	13.9	13.8	12.9
80°	11.5	12.5	11.5	11.5	10.6
82.5°	9.2	9.4	9.2	9.2	8.3
85°	5.8	5.8	4.8	4.8	4.8
87.5°	1.5	2.5	2.1	2.1	2.1
90°	0.0	0.9	2.9	2.9	2.9
92.5°	5.4	21.3	68.0	22.6	15.9
95°	16.3	49.0	220.2	81.7	52.7
97.5°	30.3	63.6	373.0	233.1	143.0
100°	40.2	72.0	425.1	387.5	251.8
102.5°	50.9	81.3	415.9	569.1	435.6
105°	67.0	94.2	379.1	722.1	692.1
107.5°	83.1	108.2	344.1	738.1	778.5
110°	93.8	118.2	326.4	719.7	794.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	104.5	127.4	316.5	688.0	783.1
115°	119.7	142.1	306.3	636.3	748.6
117.5°	134.4	155.8	302.3	586.5	699.8
120°	143.6	164.2	301.6	555.8	665.3
122.5°	152.8	172.6	301.6	531.1	633.2
125°	165.6	185.3	301.6	498.9	587.8
127.5°	176.9	195.8	301.6	473.9	549.7
130°	183.8	203.5	301.6	459.2	527.5
132.5°	190.7	210.4	300.8	447.5	509.1
135°	200.1	219.7	299.6	429.2	483.4
137.5°	209.3	229.9	299.5	411.6	460.1
140°	215.4	236.0	298.7	399.2	443.2
142.5°	223.1	242.9	299.5	386.9	427.9
145°	233.6	251.4	299.6	370.3	403.0
147.5°	244.1	259.3	299.8	355.6	382.4
150°	251.8	263.9	300.6	347.0	368.6
152.5°	257.9	268.6	300.6	340.1	357.8
155°	266.1	275.5	300.6	330.6	343.7
157.5°	274.9	281.3	301.6	324.7	333.7
160°	279.5	285.2	301.6	320.9	328.4
162.5°	284.1	288.3	301.6	317.8	323.0
165°	290.1	292.9	301.6	313.1	315.9
167.5°	295.6	296.4	302.5	309.8	312.3
170°	298.7	298.7	302.5	308.3	309.2
172.5°	300.2	301.0	302.5	306.7	306.9
175°	303.5	302.5	303.5	305.4	304.4
177.5°	304.4	303.7	303.7	305.2	303.7
180°	304.4	304.4	304.4	304.4	304.4



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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	6.13	6.92	7.01	7.79	8.89	5.79	6.58	6.67	7.45	8.54
	3H	6.63	7.33	7.53	8.22	9.34	6.30	7.00	7.19	7.88	9.00
	4H	6.90	7.56	7.81	8.45	9.58	6.54	7.20	7.45	8.09	9.22
	6H	7.13	7.73	8.05	8.63	9.77	6.75	7.35	7.67	8.25	9.39
	8H	7.21	7.78	8.13	8.69	9.84	6.82	7.39	7.74	8.30	9.44
	12H	7.26	7.80	8.19	8.71	9.87	6.85	7.39	7.78	8.30	9.46
4H	2H	6.14	6.80	7.05	7.69	8.82	5.83	6.48	6.74	7.37	8.51
	3H	6.86	7.40	7.78	8.32	9.46	6.56	7.09	7.47	8.02	9.16
	4H	7.26	7.75	8.19	8.66	9.84	6.93	7.42	7.86	8.34	9.51
	6H	7.64	8.06	8.58	9.00	10.17	7.28	7.70	8.22	8.64	9.81
	8H	7.78	8.17	8.72	9.10	10.29	7.40	7.79	8.34	8.72	9.91
	12H	7.87	8.22	8.83	9.17	10.36	7.47	7.81	8.43	8.77	9.96
8H	4H	7.35	7.74	8.29	8.67	9.85	7.04	7.43	7.99	8.37	9.55
	6H	7.85	8.17	8.82	9.15	10.33	7.52	7.83	8.48	8.81	10.00
	8H	8.08	8.36	9.05	9.32	10.53	7.71	7.99	8.69	8.96	10.16
	12H	8.25	8.50	9.23	9.46	10.71	7.85	8.10	8.82	9.05	10.31
12H	4H	7.32	7.67	8.28	8.62	9.81	7.02	7.37	7.98	8.32	9.51
	6H	7.87	8.15	8.84	9.12	10.32	7.54	7.82	8.52	8.79	9.99
	8H	8.12	8.37	9.10	9.33	10.58	7.77	8.01	8.74	8.97	10.23