

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: P854331

Luminaire Tested: SQ2-WBM-025U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854331  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-025U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

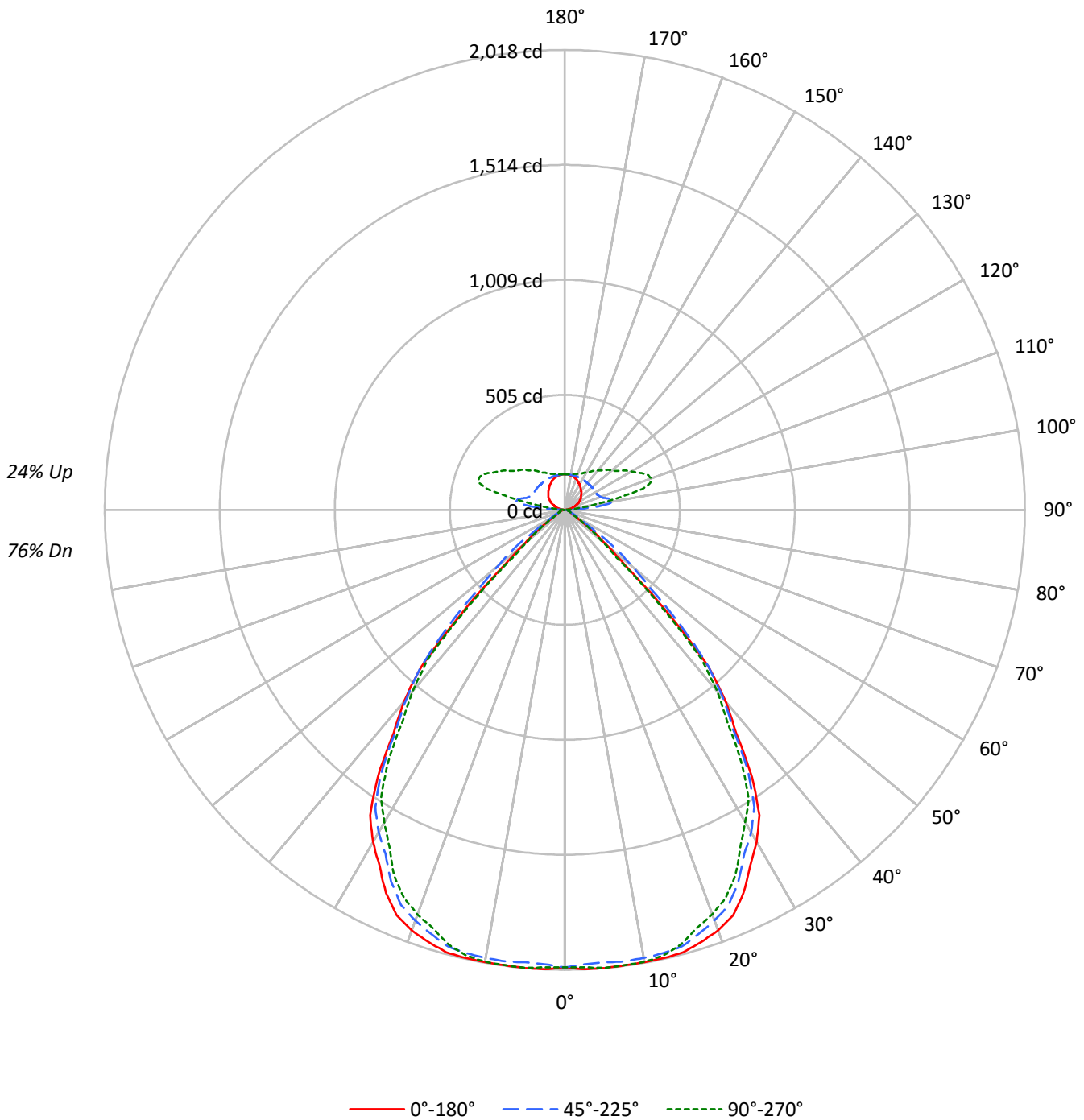
Lumens per Lamp: N/A  
Luminaire Lumens: 4107.6 lumens  
Efficiency: N/A  
Efficacy: 117.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 35  
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
RCR																				
0	113	113	113	113	108	108	108	108	98	98	98	89	89	89	80	80	80	76		
1	106	103	100	97	101	99	96	93	90	88	86	82	81	80	75	74	73	70		
2	99	93	88	84	95	90	85	82	83	79	76	76	73	71	70	68	66	63		
3	93	85	79	74	89	82	76	72	76	71	68	70	67	64	65	62	60	57		
4	86	77	71	66	83	75	69	64	69	65	61	64	61	57	60	57	54	52		
5	81	71	64	59	77	68	62	57	64	59	55	60	55	52	56	52	49	47		
6	75	65	58	53	72	63	56	52	59	53	49	55	51	47	52	48	45	43		
7	71	60	53	48	68	58	51	47	54	49	45	51	46	43	48	44	41	39		
8	66	55	48	43	63	53	47	43	50	45	41	47	43	39	45	41	38	36		
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33		
10	59	47	41	36	56	46	40	36	44	38	35	41	37	33	39	35	32	31		

**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	4.7
10°-20°	561.2	13.7
20°-30°	829.8	20.2
30°-40°	858.6	20.9
40°-50°	516.4	12.6
50°-60°	123.6	3.0
60°-70°	33.8	0.8
70°-80°	18.9	0.5
80°-90°	6.3	0.2
90°-100°	63.1	1.5
100°-110°	196.1	4.8
110°-120°	191.9	4.7
120°-130°	156.6	3.8
130°-140°	128.2	3.1
140°-150°	100.0	2.4
150°-160°	72.2	1.8
160°-170°	44.1	1.1
170°-180°	14.9	0.4
0°-30°	1582.9	38.5
0°-40°	2441.5	59.4
0°-60°	3081.5	75.0
0°-90°	3140.5	76.5
90°-120°	451.1	11.0
90°-150°	835.9	20.4
90°-180°	967.0	23.5
0°-180°	4107.6	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°	9	25	116	43	28	10
105°	34	48	193	369	352	36
115°	61	72	157	323	379	60
125°	85	94	155	254	298	76
135°	102	114	154	220	247	79
145°	120	129	154	190	206	75
155°	137	141	155	170	176	63
165°	150	151	156	161	162	42
175°	156	156	156	157	156	15
180°	156	156	156	156	156	



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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°	3.1	10.7	36.5	12.0	9.8
95°	8.6	25.4	115.7	42.7	27.7
97.5°	15.7	33.1	191.6	119.3	75.1
100°	21.0	36.9	216.0	202.1	134.8
102.5°	26.4	41.5	211.5	288.6	226.6
105°	34.4	48.4	193.1	368.6	351.8
107.5°	42.4	55.5	175.5	374.8	393.3
110°	47.8	60.9	166.3	366.0	402.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.2	65.5	161.7	350.2	396.3
115°	61.2	72.4	156.8	323.4	378.6
117.5°	69.0	79.3	154.7	297.8	354.3
120°	73.6	83.9	153.9	283.2	337.5
122.5°	78.2	88.5	154.7	270.9	320.6
125°	85.1	94.4	154.9	254.3	298.3
127.5°	90.6	100.2	154.9	241.9	279.3
130°	93.7	104.0	154.9	235.0	268.6
132.5°	97.5	107.8	154.1	228.8	260.2
135°	102.3	113.5	153.9	219.5	246.6
137.5°	107.8	118.1	153.9	210.3	235.0
140°	110.9	121.2	153.9	204.1	226.6
142.5°	114.7	124.3	153.9	198.0	218.2
145°	119.5	128.8	153.9	189.7	206.5
147.5°	125.2	133.3	154.9	181.9	195.2
150°	129.1	135.6	154.9	178.0	188.3
152.5°	132.1	137.9	154.9	174.2	183.0
155°	136.7	141.4	154.9	170.3	175.9
157.5°	141.3	144.8	154.9	166.8	170.4
160°	144.4	147.2	154.9	164.5	167.3
162.5°	146.6	148.7	154.9	162.9	165.0
165°	150.1	151.0	155.8	160.6	162.5
167.5°	152.2	152.4	154.9	159.3	160.2
170°	153.0	153.9	154.9	157.8	158.7
172.5°	154.5	154.7	155.6	157.0	157.2
175°	155.8	155.8	155.8	156.8	155.8
177.5°	155.8	155.8	155.8	155.8	155.8
180°	155.8	155.8	155.8	155.8	155.8

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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	7.30	8.20	8.03	8.92	9.76	6.96	7.85	7.68	8.57	9.42
	3H	7.81	8.60	8.55	9.33	10.21	7.48	8.27	8.21	9.00	9.88
	4H	8.08	8.82	8.84	9.56	10.46	7.72	8.46	8.48	9.20	10.10
	6H	8.32	9.00	9.09	9.74	10.65	7.94	8.62	8.71	9.36	10.27
	8H	8.40	9.04	9.18	9.80	10.71	8.01	8.65	8.79	9.41	10.32
	12H	8.45	9.06	9.23	9.82	10.75	8.04	8.65	8.82	9.41	10.34
4H	2H	7.32	8.06	8.09	8.80	9.70	7.01	7.75	7.77	8.49	9.38
	3H	8.05	8.65	8.82	9.43	10.34	7.75	8.35	8.51	9.13	10.03
	4H	8.45	8.99	9.23	9.77	10.71	8.12	8.67	8.91	9.44	10.39
	6H	8.83	9.30	9.64	10.10	11.05	8.47	8.94	9.28	9.74	10.69
	8H	8.97	9.41	9.78	10.20	11.16	8.59	9.03	9.40	9.82	10.78
	12H	9.07	9.46	9.89	10.28	11.24	8.66	9.05	9.48	9.87	10.83
8H	4H	8.54	8.97	9.34	9.77	10.73	8.24	8.67	9.04	9.47	10.42
	6H	9.04	9.40	9.88	10.24	11.20	8.71	9.06	9.54	9.90	10.86
	8H	9.27	9.58	10.11	10.42	11.40	8.90	9.22	9.75	10.06	11.03
	12H	9.45	9.73	10.29	10.55	11.59	9.04	9.32	9.88	10.15	11.18
12H	4H	8.51	8.90	9.34	9.72	10.68	8.22	8.61	9.04	9.43	10.39
	6H	9.06	9.37	9.90	10.21	11.19	8.73	9.05	9.58	9.89	10.86
	8H	9.31	9.59	10.16	10.42	11.45	8.96	9.24	9.80	10.06	11.10